# Framework for Learning and Teaching COP 26

Important Information & User Guide





Early

First

Second

Third

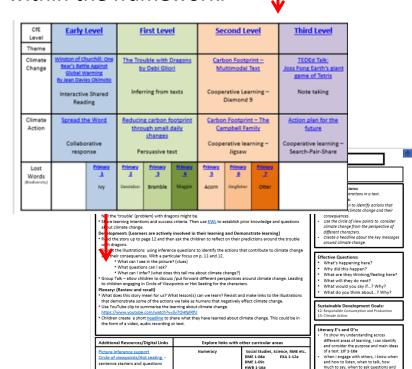


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# Rationale



#### **Learning for a Better World**

Glasgow's Learning for Sustainability Vision:

- To support all children and young people to be caring, responsible and active global citizens developing the skills, knowledge and attitudes they need as adults to enjoy living in harmony with others, in a just and sustainable world.
- All children and young people in Scotland have an entitlement to Learning for Sustainability and it is the responsibility of all practitioners to ensure this happens. This is a whole school (setting) approach.
- Learning for sustainability (LfS) is an approach to life and learning which enables learners, educators, schools and their wider communities to build a socially-just, sustainable and equitable society. An effective whole school and community approach to LfS weaves together global citizenship, sustainable development education and outdoor learning to create coherent, rewarding and transformative learning experiences.'

### **COP26 Uniting the World to Tackle Climate Change**

COP26 (26th Conference of the Parties) UN Climate Change Summit will be held in Glasgow from Monday 1st November to Friday 12th November 2021.

'The COP26 summit will bring parties together to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change.' The UK will work with all countries and join with civil society, companies and communities to inspire climate action ahead of COP26.

Glasgow has been described as the 'perfect place' to host COP 26. The 'Dear Green Place' has set a target to be carbon neutral by 2030 and 'aims to be one of the greenest cities in Europe through its Sustainable Glasgow campaign, and is 4th in the world in the Global Destination Sustainability Index.' The UK is partnering with Italy to host COP26. It is putting climate change and the reversal of bio-diversity loss at the heart of the 2021 agenda.

The Youth Summit 'Youth Climate: Driving Ambition' and the PreCop26 will be held in Milan 28th - 30th September and 30th September - 2nd October respectively. 'We will work with our international partners, and through our Presidencies, in support of a green and resilient recovery that promotes sustainable growth and jobs and delivers for those most vulnerable to the impacts of climate change.'

Go to ukcop26.org to find out more.



# Outcomes and Legacy



By engaging pupils with this resource practitioners will work towards the following outcomes:

- All children and young people in Glasgow will know what climate justice and climate change is and actions that can be taken (age and stage appropriate).
- All children and young people have the skills, knowledge and attributes to take decisions that will lessen the impact on the environment.
- All practitioners will develop their understanding of, and include in their teaching practice, Sustainable Development Goal 13, 16 and 10 (and other Global Goals as appropriate).

## **Legacy:**

- All education establishments will uphold the child's entitlement to learning about sustainable development and their right to UNCRC Article 29 (right to education).
- All practitioners will have an increased understanding of Learning for Sustainability, their role in delivering this entitlement and their understanding of the Sustainable Development Goals (Global Goals).
- Existing and new resources, information and guidance will support all establishments to continue to further develop their whole school approach to Learning for Sustainability and support all practitioners to ensure they are delivering Learning for Sustainability through their own learning and teaching.
- Children, young people and families in Glasgow can and do make sustainable choices supported by their wider community, local and national government departments and agencies.



# Support Guidancehow to use the resource



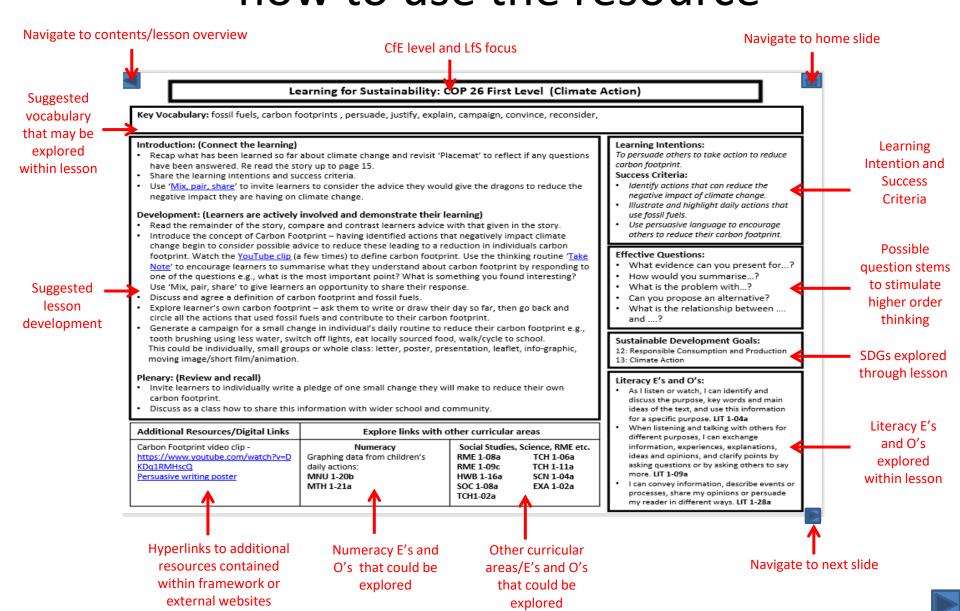
- This resource provides suggested lesson ideas from CfE early to third level focusing on the development of literacy skills within the context of Learning for Sustainability.
- Using a range of <u>texts</u> learners will explore issues and actions linked to <u>Sustainable Development Goal 13</u>;
   <u>Climate Action</u>. You may wish to raise awareness of the Sustainable Development Goals with your learners prior to engaging in these lessons, particularly SDG 13, Climate Action. Supporting information and videos to share can be found on <u>The World's Largest Lesson</u> website.

- There are two lessons available for each CfE level; one focusing on climate change and the other climate action.
- These lessons are a guide and should be adapted to suit the needs and developmental stage of your learners, being mindful of differentiation and pace and challenge.
- The literacy strategies and approaches contained within the lessons will be more effective if learners have prior experience of engaging with them.
- All supporting resources for these lesson studies are contained within this presentation. Use the links in blue to navigate to them.



# Support Guidancehow to use the resource



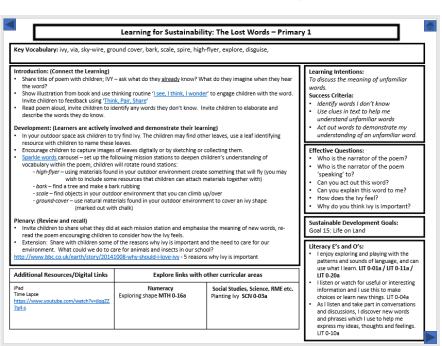




# Support Guidance



- how to use the resource
- The Lost Words (available to all primary/secondary establishments within Glasgow) could be used to explore vocabulary development and awareness of biodiversity within the context of outdoor learning.



- The suggested lesson ideas within this resource is intended to support literacy learning within an outdoor environment whilst building learners' environmental awareness.
- Some additional resources may need sought to support the effectiveness of these lessons.
- If your establishment does not have their copy of the Lost Words book please notify the Glasgow Improvement Team.

Further information and guidance can be found at: <a href="https://www.johnmuirtrust.org/initiatives/the-lost-words">https://www.johnmuirtrust.org/initiatives/the-lost-words</a>



# Sustainable Development Goals (SDGs)





### "What Are The Global Goals?

On 25th September 2015, leaders from 193 member states of the United Nations, met to discuss the world's problems and decide on a plan to tackle them. They named this plan the 17 Sustainable Development Goals (commonly known as the Global Goals).

The three big aims of the Global Goals are that we **fight inequality and injustice**, **end extreme poverty** and **tackle climate change**. The Global Goals are the most ambitious agreement for sustainable development that world leaders have ever made.

They build on the success of their predecessors, the Millennium Development Goals, and aim to go further to end all forms of poverty. That is why we need everyone to know about these Goals and to take action for them. Everyone, everywhere has a part to play."

The World's Largest Lesson, Project Everyone





# Climate Change

"Climate change is a complex moral, scientific, social and technological issue that is likely to be one of the defining issues of the 21st century. It is essential that children and young people are given the opportunity to learn about this important issue and develop informed opinions and views as global citizens. In addition to being explicitly mentioned in many experiences and outcomes, climate change offers a stimulating, challenging and relevant context for learning across the curriculum."

**Education Scotland; Exploring Climate Change** 

#### **Downloads**

- DPF file: Exploring climate change: The basics (420KB)
- DPF file: Exploring climate change: Evidence (322KB)
- PDF file: Exploring climate change: Impacts (248KB)
- PDF file: Exploring climate change: Predictions (23KB)
- PDF file: Exploring climate change: The response (376KB)
- DPF file: Exploring climate change: Controversy (322KB)
- DPF file: Exploring climate change: Take action (389KB)



Further reading available:

https://education.gov.scot/improvement/learning-resources/exploring-climate-change



# **Experiences and Outcomes**



"The curriculum areas of sciences, technologies, social studies, health and wellbeing and religious and moral education provide many rich opportunities to learn about climate change, renewable energy and sustainable development including moral principles which link to human responsibility for the environment."

**Climate Change in Scottish Education Briefing: Education Scotland** 

Early Level	<b>Technologies</b> – Technological developments in society and business	To help care for the environment, I reduce, re-use and recycle the resources I use.  TCH 0-06a		
First level	Religious and moral education – Development of beliefs and values	I am developing an increasing awareness and understanding of my own beliefs and I put them into action in positive ways. <b>RME 1-08a</b> I am becoming aware that people's beliefs and values affect their actions. <b>RME 1-09c</b>	Health and Wellbeing (Responsibility of All) - Mental, emotional, social and physical wellbeing  I am learning to assess and manage risk, to protect myself and others, and to reduce the potential for harm when possible.  HWB 0-16a / HWB 1-16a /	
Second Level	<b>Technologies</b> – Technological developments in society and business	I can analyse how lifestyles can impact on the environment and Earth's resources and can make suggestions about how to live in a more sustainable way. <b>TCH 2-06a</b> I can make suggestions as to how individuals and organisations may use technologies to support sustainability and reduce the impact on our environment. <b>TCH 2-07a</b>		
	Religious and moral education – development of beliefs and values	I am developing an increasing awareness and understanding of my own beliefs and I put them into action in positive ways. RME 2-08a I am developing my understanding of how my own and other people's beliefs and values affect their actions. RME 2-09d	HWB 2-16a / HWB 3-16a  I know and can demonstrate how to keep myself and others	
Third level	Science – Planet Earth	By investigating renewable energy sources and taking part in practical activities to harness them, I can discuss their benefits and potential problems. SCN 3-04b I can explain some of the processes which contribute to climate change and discuss the possible impact of atmospheric change on the survival of living things. SCN 3-05b	safe and how to respond in a range of emergency situations.  HWB 0-17a / HWB 1-17a /  HWB 2-17a / HWB 3-17a  I know and can demonstrate	
	<b>Technologies</b> – Technological developments in society and business	I can identify the costs and benefits of using technologies to reduce the impact of our activities on the environment and business. <b>TCH 3-07a</b>	how to travel safely.  HWB 0-18a / HWB 1-18a /  HWB 2-18a / HWB 3-18a	
	Religious and moral education – Development of beliefs and values	I am developing an increasing awareness and understanding of my own beliefs and I put them into action in positive ways. <b>RME 3-08a</b> I can explain how the different beliefs that people have, including beliefs which are independent of religion, relate to their moral viewpoints and how this leads them to respond to moral issues. <b>RME 3-09c</b>		



Click links for E's and O's specifically related to climate change and biodiversity

# Lessons – Overview



CfE Level	<u>Early</u> l	<u>Level</u>	<u>F</u>	irst Leve	<u>al</u>	Se	cond Le	<u>vel</u>	Third Level
Theme									
Climate Change	Winston of Churchill: One Bear's Battle Against Global Warming By Jean Davies Okimoto		The Trouble with Dragons by Debi Gliori			oon Footpr ultimodal 1		TEDEd Talk:  Joss Fong Earth's giant  game of Tetris	
	Interactive Read		Inferring from texts  Cooperative Learning – Diamond 9		Note taking				
Climate Action	Spread the Collaborespo	rative	Reducing carbon footprint through small daily changes Persuasive text		<u>Car</u>	n Footprin mpbell Far erative lear Jigsaw	nily	Action plan for the future  Cooperative learning – Search-Pair-Share	
Lost Words (Biodiversity)		Primary <u>1</u> Ivy	Primary 2 Dandelion	Primary 3 Bramble	Primary 4 Magpie	Primary 5 Acorn	Primary 6 Kingfisher	Primary 7 Otter	

Click links for lesson plans



# Suggested Lesson Plans



Early

First

Second

Third

Climate Change

Climate Change

Climate Change Climate Change

Climate Action

Climate Action

Climate Action Climate Action

Taking Learning
Outdoors (P1)

Lost Words – Taking Learning Outdoors (P2, P3 and P4))

Lost Words – Taking Learning Outdoors (P5, P6 and P7))

**Visible Thinking Routines** 

Additional Resources
Section



# Learning for Sustainability: COP 26 Early Level (Climate Change)

Key Vocabulary: Global Warming, habitat, tundra, reduce, reuse, recycle, consequence, action, energy, challenge

Info for teacher/practitioner - Polar bears rely on sea ice to cover large areas in search of food. A longer melting season due to climate change means that sea ice is forming later and breaking up earlier in the year — <a href="https://www.wwf.org.uk">www.wwf.org.uk</a> (search polar bears)

Please see additional slide regarding learning environments and examples.

The book 'Winston of Churchill, One Bear's Battle Against Global Warming', should be explored and revisited across a week or longer, dependent on the children's needs and interests.

Read the story-using an <u>interactive shared reading approach</u> (each read will develop children's understanding and ability to retell the story, consider use of props to support children's opportunities to act out and retell the story).

# Introduction: (Connect the learning)

- Before reading use the front cover/ blurb to invite predictions about the story. Use thinking routine <u>I see, I</u> think, I wonder to stimulate conversation.
- Through conversation determine prior knowledge of polar bears, habitats, the Arctic etc. use the effective
  questions to stimulate discussion and record responses on a <u>concept map</u> this will provide a baseline of
  knowledge.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- Explore new vocabulary by making words sparkle using the Shooting for the SSTARS approach.
- Ask and answer questions about events in the story and explore ideas relating to global warming using think alouds and ponderings to stimulate children's thinking. HOTS questions.

#### Opportunities for further development:-

- Role play the story through the use of small world, block play etc. to retell key events.
- Sequencing scenes, story maps, simple time-line, matching pictures/props to characters, guided writing storyboard or story map (Hear, Say, Play, **Write** approach)
- Engage children in STEM experience relating to ice and different temperatures to help support children's understanding of global warming.
- Provide access to non-fiction texts (including digital such as video clips) relating to polar bears and the arctic to promote and extend children's interest.

#### Plenary: (Review and recall)

- Recap story using questions focused on the 5 finger retell to determine knowledge and comprehension.
- Where did the story take place? What happened in the beginning/middle/end of the story? What problem did Winston and the polar bears have? What could you do to help Winston and the polar bears?

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Additional Resources/Digital Links	Explore links with other curricular areas			
National Geographic Kids - Issue 173  A range of books - fiction and non- fiction  YouTube - explore range of videos by searching polar bears	Numeracy Comparing icebergs MNU 0-11a	Social Studies, Science, RME etc. SCN 0-05a		

#### **Learning Intentions:**

To recount events in a story.

To talk about unfamiliar words in a text and answer questions to show understanding.

#### **Success Criteria:**

- Retell a familiar story about global warming in a variety of different ways (through indoor and outdoor environments).
- Contribute to discussions about global warmina.
- Use new words in my play to show my understanding of global warming.

#### **Effective Questions:**

- Tell me about the front cover: What can you see? (discuss words on placards) What does it make you think about? What questions or puzzles do you have?
- I wonder what Global Warming means?
- (back cover blurbs)I wonder.....why Winston will have to fight for ice?

#### **Sustainable Development Goals:**

- 13 Climate Action
- 12 Responsible consumption and production
- 15 Life on Land

- I listen or watch for useful or interesting information and I use this to make choices or learn new things. LIT 0-04a
- To help me understand stories and other texts, I ask questions and link what I am learning with what I already know. LIT 0-07a / LIT 0-16a / ENG 0-17a
- I enjoy exploring events and characters in stories and other texts, sharing my thoughts in different ways. LIT 0-19a



# Learning for Sustainability: COP 26 Early Level (Climate Action)

Key Vocabulary: action, protest, inspired, exhausted, courage

#### Introduction: (Connect the learning)

- Use the effective guestions to recall with the children the story of Winston of Churchill.
- Revisit the concept map and add on anything the children have learned or discovered about polar bears, their habitats or the Arctic. Learning may have been extended through children exploring other texts such as non-fiction and digital, through STEM experiences relating to why ice melts.

### Development: (Learners are actively involved in their learning and demonstrate learning)

- Once children are familiar with the story. Introduce, open and read with the children the <u>letter from Winston</u> (example attached which can be adapted for age and stage). You could use the ChatterPix app to create a video message from 'Winston'.
- Engage children in a discussion about the contents of the letter or video message inviting children to think about the problem that Winston needs help to solve.
- With the children, make a list of all the actions you could take in nursery/school and at home that
  could help Winston and reduce the effects of climate change. Suggestions for positive climate action
  can be found in the <u>book</u>, other suggestions can be found <u>here</u> such as reduce, reuse, recycle, using
  less energy e.g., turning out the lights, walking or cycling instead of using a car or even planting more
  trees.
- Encourage children to respond to Winston's plea for help. This could be in the form of a video message, voice note, dramatisation, drawing or written response.
- Capture children's responses to Winston and 'send' it back to him.

#### Plenary: (Review and recall)

- Reread Winston of Churchill and talk about all the ways you are now going to take action against climate change.
- Children could use the '<u>Doodle It</u>' thinking routine to share how they will personally take action.

#### **Opportunities for further development**

- Within your learning space, create a visual representation where staff and children can recognise and celebrate their collaborative efforts of taking action for example, adding a symbol such as a light bulb to acknowledge that a child has remembered to switch off the lights when leaving a room.
- · Create placards and have a protest.

Additional Resources/Digital Links	Explore links with o	ther curricular areas
Chatterpix – photograph Winston or polar bear teddy.	Numeracy Record the actions people are doing to help Winston MNU 0-20c	Social Studies, Science, RME etc. SOC 0-08a

#### **Learning Intentions:**

To give a response (verbal/written) inspired by what I have listened to/read.

#### **Success Criteria:**

 Plan what I want to 'write' about or respond by talking about my ideas, acting it out and/or drawing.

#### **Effective Questions:**

- Can you remember what happened in the story?
- What was the problem Winston and the polar bears had?
- What does Winston want us to do?
- I wonder how we can help Winston?
- I wonder what will happen if we do this?
- I wonder what will happen if we don't?

#### **Sustainable Development Goals:**

12: Responsible Consumption and Production

13: Climate Action

- Within real and imaginary situations, I share experiences and feelings, ideas and information in a way that communicates my message. LIT 0-26a
- As I play and learn, I enjoy exploring interesting materials for writing and different ways of recording my experiences and feelings, ideas and information. LIT 0-21b



# Learning for Sustainability: COP 26 First Level (Climate Change)

Key Vocabulary: climate change, carbon dioxide, fossil fuels, greenhouse effect, consequences, perspectives

#### Introduction: (Connect the learning)

- Before sharing title and front cover use thinking routine 'Beginning, Middle, End' and the image from the inside title page of the text 'The Trouble with Dragons'. Invite feedback after each question.
- Use <u>before reading strategies</u> to illicit what learners can predict from the title and <u>front cover</u>, ask what they can picture in their head from the title. Then use the <u>inside spread</u> to illicit from leaners what they feel the 'trouble' (problem) with dragons might be.
- Share learning intentions and success criteria then use thinking routine 'Placemat' to establish prior knowledge and questions about climate change. To differentiate, learners can annotate mat with writing or drawings, provide time for groups to share the questions they have identified.

#### Development: (Learners are actively involved and demonstrate their learning)

- The story will be read in 2 parts. Read text up to page 12 and then ask learners to reflect on their predictions around the 'trouble' with dragons.
- Revisit the illustrations using <u>inference questions</u> to identify the actions that contribute to climate change and their consequences. With a particular focus on <u>p. 11 and 12.</u>
  - What can I see in the picture? (clues)
  - What questions can I ask?
  - What can I infer? (what does this tell me about climate change?)
- Group Talk allow learners to discuss/put forward different perspectives around climate change. Leading to children engaging in <u>Circle of Viewpoints or Hot Seating</u> for the characters.

#### Plenary: (Review and recall)

- Encourage learners to reflect on 'what does this story mean for us?' What lesson(s) can we learn? Revisit and make links to the illustrations that demonstrate some of the actions we take as humans that negatively effect climate change.
- Use YouTube clip to summarise the learning about climate change. https://www.youtube.com/watch?v=Sv7OHfpIRfU
- Invite learners to create a short <u>headline</u> to share what they have learned about climate change. This could be in the form of a video, audio recording or text.

Additional Resources/Digital Links	Explore links with other curricular areas	
Climate Change (according to a kid) https://www.youtube.com/watch?v=S v7OHfpIRfU	Numeracy	Social Studies, Science, RME etc. RME 1-08a EXA 1-12a RME 1-09c HWB 1-16a SOC 1-12b TCH 1-02a

#### **Learning Intentions:**

To infer from illustrations in a text.

#### **Success Criteria:**

- Use illustration to identify actions that contribute to climate change and their consequences.
- Use the circle of view points to consider climate change from the perspective of different characters.
- Create a headline about the key messages around climate change.

#### **Effective Questions:**

- What's happening here?
- Why did this happen?
- What are they thinking/feeling here?
- What will they do next?
- What would you say if...? Why?
- What do you think about...? Why?

#### **Sustainable Development Goals:**

12: Responsible Consumption and Production

13: Climate Action

- To show my understanding across different areas of learning, I can identify and consider the purpose and main ideas of a text. LIT 1-16a
- When I engage with others, I know when and how to listen, when to talk, how much to say, when to ask questions and how to respond with respect. LIT 1-02a



# **Learning for Sustainability: COP 26 First Level (Climate Action)**

Key Vocabulary: fossil fuels, carbon footprints, persuade, justify, explain, campaign, convince, reconsider,

#### **Introduction: (Connect the learning)**

- Recap what has been learned so far about climate change and revisit 'Placemat' to reflect if any questions have been answered. Re read the story up to page 15.
- Share the learning intentions and success criteria.
- Use 'Mix, pair, share' to invite learners to consider the advice they would give the dragons to reduce the negative impact they are having on climate change.

#### Development: (Learners are actively involved and demonstrate their learning)

- Read the remainder of the story, compare and contrast learners advice with that given in the story.
- Introduce the concept of Carbon Footprint having identified actions that negatively impact climate change begin to consider possible advice to reduce these leading to a reduction in individuals carbon footprint. Watch the <a href="YouTube clip">YouTube clip</a> (a few times) to define carbon footprint. Use the thinking routine 'Take <a href="Note">Note</a>' to encourage learners to summarise what they understand about carbon footprint by responding to one of the questions e.g., what is the most important point? What is something you found interesting? Use 'Mix, pair, share' to give learners an opportunity to share their response.
- Discuss and agree a definition of carbon footprint and fossil fuels.
- Explore learner's own carbon footprint ask them to write or draw their day so far, then go back and circle all the actions that used fossil fuels and contribute to their carbon footprint.
- Generate a campaign for a small change in individual's daily routine to reduce their carbon footprint e.g., tooth brushing using less water, switch off lights, eat locally sourced food, walk/cycle to school.
   This could be individually, small groups or whole class: letter, poster, presentation, leaflet, info-graphic, moving image/short film/animation.

#### Plenary: (Review and recall)

- Invite learners to individually write a pledge of one small change they will make to reduce their own carbon footprint.
- Discuss as a class how to share this information with wider school and community.

Additional Resources/Digital Links	Explore links with other curricular areas		areas
Carbon Footprint video clip - https://www.youtube.com/watch?v=D KDq1RMHscQ	Numeracy Graphing data from children's daily actions: MNU 1-20b MTH 1-21a	Social Studies, RME 1-08a RME 1-09c HWB 1-16a SOC 1-08a TCH1-02a	Science, RME etc. TCH 1-06a TCH 1-11a SCN 1-04a EXA 1-02a

#### **Learning Intentions:**

To persuade others to take action to reduce carbon footprint.

#### **Success Criteria:**

- Identify actions that can reduce the negative impact of climate change.
- Illustrate and highlight daily actions that use fossil fuels.
- Use persuasive language to encourage others to reduce their carbon footprint.

#### **Effective Questions:**

- What evidence can you present for...?
- How would you summarise...?
- What is the problem with...?
- Can you propose an alternative?
- What is the relationship between .... and ....?

#### **Sustainable Development Goals:**

- 12: Responsible Consumption and Production
- 13: Climate Action

- As I listen or watch, I can identify and discuss the purpose, key words and main ideas of the text, and use this information for a specific purpose. LIT 1-04a
- When listening and talking with others for different purposes, I can exchange information, experiences, explanations, ideas and opinions, and clarify points by asking questions or by asking others to say more. LIT 1-09a
- I can convey information, describe events or processes, share my opinions or persuade my reader in different ways. LIT 1-28a



# **Learning for Sustainability: COP 26 Second Level (Climate Change)**

**Key Vocabulary:** carbon, carbon footprint, CO<sup>2</sup> emissions, greenhouse gases, climate crisis, environment, sustainability, consequences, action, pollution, environmentally friendly

#### **Introduction: (Connect the learning)**

For this lesson, group class into co-operative learning groups (ideally 4 in a group).

- Use the <u>starter images</u> and the thinking routine '<u>Zoom In</u>' to initiate thinking/discussion with class (possible <u>questions</u> to support). Image should be revealed in sections in order to elicit more <u>prediction</u>.
- Use thinking routine 'Think-Puzzle-Explore' to establish learners prior knowledge and questions they have relating to climate change.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- <u>Climate change definition</u> discuss definition of climate change and use <u>word art</u> to introduce key vocabulary. Invite learners to highlight words/phrases according to instructions on slide (opportunities to add words to Word art if appropriate e.g. in addition to definition how does it make them feel?). Explore <u>key vocabulary</u> using grid.
- Watch the clip <u>'Simpleshow explains the carbon footprint'</u> encourage children to use <u>during watching</u> <u>strategies</u> e.g., ask myself questions, make connections, check for main ideas. After watching give time to discuss in group.
- Introduce SDG 13 What is being done about climate change? Watch <u>Newsround clip</u> about COP 25.
   Continue to reinforce during/after viewing strategies. Discuss.
- Diamond 9 activity using knowledge gained from watching video clips give time for groups to explore, ask questions, think about actions that can be taken to be more sustainable. Share <u>Diamond 9</u> tiles and talk through each as required to support learners understanding. Once children have a good understanding of what images mean ask them to prioritise actions using <u>Diamond 9 template</u>.

#### Plenary: (Review and recall):

UN Rights of the child –Article 29 (goals of education): Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment.

• Share Article 29 to focus learners in on their role in respecting the environment. 'You can make a difference.'

Additional Resources/Digital Links	Explore links with other curricular areas		
Simpleshow https://www.youtube.com/watch?v=8q7_a V8eLUE&feature=youtu.be News Round https://www.bbc.co.uk/newsround/50641 021	Numeracy	Social Studies, Science, RME etc. SOC 2-08a	

#### **Learning Intentions:**

To use cooperative skills to develop knowledge and make decisions.

#### **Success Criteria:**

- Use before, during and after strategies to identify the main ideas from a text.
- Illustrate positive body language as I communicate my views.
- Express my opinions on the priority of Sustainable Development Goals actions.
- Cooperatively make decisions and justify the choices made.

#### **Effective Questions:**

- What can you see?
   How does it make you feel?
- Summarise the text in your own words
- Identify facts from the text
   Does the author have a particular viewpoint
   or argument? Evaluate how well they put this
   forward use evidence from the text.
   Can you create an illustration based on what
   you have read/watched?

#### **Sustainable Development Goals:**

- 12: Responsible Consumption and Production
- 13: Climate Action

- When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking. LIT 2-02a
- I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience. LIT 2-06a
  - When listening and talking with others for different purposes, I can: share information, experiences and opinions, explain processes and ideas, identify issues raised and summarise main points or findings, clarify points by asking questions or by asking others to say more. LIT 2-09a



# Learning for Sustainability: COP 26 Second Level (Climate Action)

**Key Vocabulary:** carbon, carbon footprint, CO<sup>2</sup> emissions, greenhouse gases, climate crisis, environment, sustainability, consequences, action, pollution, environmentally friendly

#### Introduction: (Connect the learning) For this lesson, group class into co-operative learning groups (ideally 4 in a group).

• Recap prior learning – use different coloured pen to annotate 'Think-Puzzle-Explore' grid adding in knowledge gained and answers to any of the questions they initially had.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- Re-watch <u>'Simpleshow explains the carbon footprint'</u> facilitate a brief discussion around actions for low carbon living making links to Article 29 shared in last lesson e.g., responsibility to respect the environment.
- <u>Jigsaw activity</u> during this activity children will leave their home group to read about one of the 4 chosen actions that could be taken to be more sustainable. They will then come back together and report on their action in order to complete the next task. It may be helpful to revisit and remind learners of the during reading strategies: check for main ideas, think about what you know/make connections, summarise, and make notes.
- Once jigsaw activity is complete gather feedback from groups about actions that can be taken to live more sustainably.
- Introduce the <u>Campbell family</u>. In pairs/groups learners read about each <u>character's day</u> and discuss some of the ways that each family member can become more sustainable in their day to day lives.
- Using what they have learned, groups should now create a <u>story map/board</u> showing 'a day in the life of' a Campbell family member trying to make changes to live more sustainably.
- Groups present story maps/boards other groups should be encouraged to think about what they see/hear and ask question to support/challenge. Alternatively, children could create a drama in role of each family member.

#### Plenary: (Review and recall)

- Revisit 'Think-Puzzle-Explore' and discuss any questions that remain unanswered and consider how you
  can explore and find answers to these.
- <u>Pledge</u> individually, children can make a pledge about the change(s) they will make to live more sustainably.

Additional Resources/Digital Links	Explore links with other curricular areas	
Transport: video <a href="https://www.youtube.com/watch?v=H">https://www.youtube.com/watch?v=H</a> <a href="eqd7IH7ZTA">eqd7IH7ZTA</a>	Numeracy	Social Studies, Science, RME etc. SOC 2-08a
Food: https://www.bbc.co.uk/newsround/46 903864_/		

#### **Learning Intentions:**

To work cooperatively to explore knowledge and solve problems.

#### **Success Criteria:**

- Use before, during and after strategies to identify the main ideas from a text.
- Illustrate positive body language as I communicate my views.
- Pose solutions based on my understanding of sustainable actions.
- Communicate group conclusion through a range of media.

#### **Effective Questions:**

- What can you see?
   How does it make you feel?
- Are there any changes the family have made that you could do?
- Summarise the text in your own words.
- How do you think this text has achieved this purpose?
- How will your group communicate your ideas?

#### **Sustainable Development Goals:**

- 12: Responsible Consumption and Production
- 13: Climate Action

- When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking. LIT 2-02a
- I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience. LIT 2-06a
- When listening and talking with others for different purposes, I can: share information, experiences and opinions, explain processes and ideas, identify issues raised and summarise main points or findings, clarify points by asking questions or by asking others to say more. LIT 2-09a



# Learning for Sustainability: COP 26 Third Level (Climate Change)

Key Vocabulary: emissions, carbon footprint, carbon neutral, CO<sup>2</sup>, greenhouse gas, global warming

#### **Introduction: (Connect the learning)**

- Use the <u>starter image</u> and encourage learners to talk about what they can see and what they think the picture represents. Use the thinking routine '<u>The 3 Y's'</u> to encourage learners to consider why the topic of climate change matters to the world, the people around them and to them personally.
- Use 'Compass Points' to establish what 'excites' and 'worries' learners about the topic climate change, what they 'need' to know and what their 'stance' (opinion) is on climate change.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- Using the TEDEd talk clip on climate change <u>Joss Fong Earth's giant game of Tetris</u> learners should watch the clip initially **without** taking any notes.
- View clip for a 2<sup>nd</sup> time, learners should be looking to take notes on the key features and aspects of carbon dioxide and climate change. (Note taking should be part of prior learning)
   If learners require scaffolding for their note taking, they can focus on the 4 main questions below or use the concept map provided.

Where does CO<sup>2</sup> come from? What has led to changes in our climate? How does the planet process CO<sup>2</sup>? What is the impact of increased CO<sup>2</sup> level

- Pupils should watch the video a third time and use the <u>+1 thinking routine</u>.
- After watching the video discuss in pairs/groups what the video has shown. Invite feedback and encourage pairs/groups to share with whole class. Summarise what CO<sup>2</sup> is and the impact this is having on our planet.

#### Plenary: (Review and recall)

• Refer back to 'Compass Points' to establish if there are any adaptations to their thinking on the topic of climate change – excites, worries, need to know and stance.

Homework task - calculate your own carbon footprint (https://footprint.wwf.org.uk)

Additional Resources/Digital Links	Explore links v	re links with other curricular areas	
More information on how important the ocean is: www.climatekids.nasa.gov/ocean	Numeracy	Social Studies, Science, RME etc. SOC 3-08a SOC 3-10a SOC 3-12a SCN 3-05b	

#### **Learning Intentions:**

To identify and give an accurate account of the main ideas of a multimodal text.

To use own words to make and organise notes, selecting key information.

#### **Success Criteria:**

- Listen to and watch a multimodal text to understand: what CO<sup>2</sup> is and the impact greenhouse gasses has on our environment.
- Make notes to record the main ideas of how CO<sup>2</sup> is impacting our planet.
- Use my notes to discuss climate change.

#### **Effective Questions:**

- Describe the effect CO<sup>2</sup> is having on the earth.
- Summarise the impact greenhouse gasses are having on our planet.
- Imagine what the planet will look like in 50 years.

#### **Sustainable Development Goals:**

13: Climate Action

- When I engage with others, I can make a relevant contribution, encourage others to contribute and acknowledge that they have the right to hold a different opinion. I can respond in ways appropriate to my role and use contributions to reflect on, clarify or adapt thinking. LIT 3-02a
- As I listen or watch, I can: identify and give an accurate account of the purpose and main concerns of the text, and can make inferences from key statements, identify and discuss similarities and differences between different types of text, use this information for different purposes. LIT 3-04a
- As I listen or watch, I can make notes and organise these to develop thinking, help retain and recall information, explore issues and create new texts, using my own words as appropriate.
   LIT 3-05a



# Learning for Sustainability: COP 26 Third Level (Climate Action)

Key Vocabulary: emissions, carbon footprint, carbon neutral, CO<sup>2</sup>, greenhouse gas, global warming

#### Introduction: (Connect the learning)

• Watch the film trailer (<u>An Inconvenient Sequel: Truth to Power</u>) on the reality of climate change and impact it is having on our planet. Whilst watching the trailer learners should take notes focusing on where climate change is having the most devastating impact.

(Background information and synopsis of film available via Wikipedia)

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- <u>'Search-Pair-Share'</u> (cooperative learning task) Using the 4 articles linked on the 'Search-Pair-Share' slide
  partner learners up to read the same article. Learners should highlight key points about climate change and its
  impact on the environment.
- Use the thinking routine '4 C's' to encourage learners to discuss with their partner the long term impact of climate change (positive/negative) making note of the connections, challenges, concepts and changes relating to the article they have read. Pairs should then meet with another pair and share their 4 C's looking for further connections between the texts. Ideally, all pairs should have the opportunity to meet with another pair from each of the article groups: ice caps, extreme weather, forests, pollution (articles are suitable for differentiating ability levels).
- Provide opportunity to feedback from 'Search-Pair-Share' task and ask directed questions to check understanding among all learners in the class e.g., "Did anyone find out how deforestation has contributed to climate change?" "What human activities is impacting negatively on climate change?" "How can humans take action to impact positively on climate change?"
- Using the '<u>Circle of Actions</u>' routine invite learners to illustrate and summarise the negative impact of human activity on our planet and consider how they can contribute positive actions to counter act within their inner circle, community and wider world. Learners may wish to consider how they can raise awareness of climate change as an option for positive action.

#### Plenary: (Review and recall)

• Invite the class to reflect on what they can change in their own lives in order to have a positive impact on climate change. Use the <u>plenary wheel</u> to support learners self-reflection. Learners should identify one positive action they can begin to adopt.

Additional Resources/Digital Links	Explore links with other curricular areas		
www.keepscotlandbeautiful.org	Numeracy	Social Studies, Science, RME etc. SOC 3-08a	
http://flood.firetree.net/		SOC 3-10a	
https://friendsoftheearth.uk/		SOC 3-12a SCN 3-05b	

#### **Learning Intentions:**

To work collaboratively and contribute to a group discussion, offering relevant ideas, knowledge or opinions with supporting evidence.

To summarise key information in own words.

#### Success Criteria:

- Read a text, highlighting and summarising key points about climate change and its impact on the environment.
- Use knowledge gained to summarise and share information with others.
- Identify a climate action I can take.

#### **Effective Questions:**

- **Summarise** your thoughts and main points from the texts.
- Evaluate\_how well the writer use.
   evidence to back up his/her viewpoint
- Explain how your actions can make a difference.

#### **Sustainable Development Goals:**

13: Climate Action

15: Life on Land

- When I engage with others, I can make a relevant contribution, encourage others to contribute and acknowledge that they have the right to hold a different opinion. I can respond in ways appropriate to my role and use contributions to reflect on, clarify or adapt thinking. LIT 3-02a
- When listening and talking with others for different purposes, I can: communicate information, ideas or opinions, explain processes, concepts or ideas, identify issues raised, summarise findings or draw conclusions. LIT 3-09a
- I can make notes and organise them to develop my thinking, help retain and recall information, explore issues and create new texts, using my own words as appropriate. LIT 3-15





# The Lost Words



## Learning for Sustainability: The Lost Words: IVY - Primary 1

Key Vocabulary: ivy, via, sky-wire, ground cover, bark, scale, spire, high-flyer, explore, disguise,

#### Introduction: (Connect the learning)

- Share title of poem with children; IVY ask what do they <u>already</u> know? What do they imagine when they hear the word?
- Show illustration from book and use thinking routine '<u>I see</u>, <u>I think</u>, <u>I wonder</u>' to engage children with the word. Invite children to feedback using '<u>Think</u>, <u>Pair</u>, <u>Share</u>'
- Read poem aloud, invite children to identify any words they don't know. Invite children to elaborate and describe the words they do know.

#### Development: (Learners are actively involved and demonstrate their learning)

- In your outdoor space ask children to try to find ivy. The children may find other leaves, use a leaf identifying resource with children to name these leaves.
- · Encourage children to capture images of leaves digitally or by sketching or collecting them.
- <u>Making words sparkle</u> carousel set up the following mission stations to deepen children's understanding of vocabulary within the poem, children will rotate round stations:
  - high-flyer using materials found in your outdoor environment create something that will fly (you may wish to include some resources that children can attach materials together with)
  - bark find a tree and make a bark rubbing
  - scale find objects in your outdoor environment that you can climb up/over
  - ground-cover use natural materials found in your outdoor environment to cover an ivy shape (marked out with chalk)

#### Plenary: (Review and recall)

- Invite children to share what they did at each mission station and emphasise the meaning of new words, reread the poem encouraging children to consider how the Ivy feels.
- Extension: Share with children some of the reasons why ivy is important and the need to care for our environment. What could we do to care for animals and insects in our school?

http://www.bbc.co.uk/earth/story/20141008-why-should-i-love-ivy - 5 reasons why Ivy is important

Additional Resources/Digital Links	Explore links with other curricular areas		
iPad Time Lapse https://www.youtube.com/watch?v=jlqqZZ 7q4-s Leaf identification sheet https://www.woodlandtrust.org.uk/media/ 48345/leaf-id-sheet.pdf	Numeracy Exploring shape MTH 0-16a	Social Studies, Science, RME etc. Planting Ivy SCN 0-03a	

#### **Learning Intentions:**

To discuss the meaning of unfamiliar words.

#### **Success Criteria:**

- Identify words I don't know.
- Use clues in a text to help me understand unfamiliar words.
- Act out words to demonstrate my understanding of an unfamiliar word.

#### **Effective Questions:**

- Who is the narrator of the poem?
- Who is the narrator of the poem 'speaking' to?
- Can you act out this word?
- Can you explain this word to me?
- · How does the Ivy feel?
- Why do you think ivy is important?

#### **Sustainable Development Goals:**

Goal 15: Life on Land

- I enjoy exploring and playing with the patterns and sounds of language, and can use what I learn. LIT 0-01a / LIT 0-11a / LIT 0-20a
- I listen or watch for useful or interesting information and I use this to make choices or learn new things. LIT 0-04a
- As I listen and take part in conversations and discussions, I discover new words and phrases which I use to help me express my ideas, thoughts and feelings. LIT 0-10a



# Learning for Sustainability: The Lost Words: DANDELION - Primary 2

Key Vocabulary: dazzle, dandelion, nettle, milk witch, parachute, thrive, perfectionists, scatterseed, merely, clover, lawn, dock, weed, thistle

#### Introduction: (Connect the learning)\_

- Reveal parts of the illustration of DANDELION using the thinking routine 'Zoom In' (Cover page with post-it notes and reveal what is underneath gradually). Listen to the responses from learners, what words do they use to describe the dandelion?
- Share the poem and read aloud as a class investigating key vocabulary.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- Ask learners to find any dandelions outside? If there is none in your outdoor environment discuss with learners where they might find them. Use photographs, illustrations from text or watch videos of dandelions in the wild to support learners identification and discuss the authors word choice 'dazzle', 'little sun-of-the-grass', 'evening glow' and 'fallen star'.
- Ask learners: Have you ever seen a dandelion before? Have you ever made a wish and blown the head off a dandelion? Using 'Think, Pair, Share': what do you think happens when the head of a dandelion is scattered/dispersed?
- Invite learners to take part in a human seed dispersal take one dandelion and blow the seeds across a new piece of soil, dispersing the seeds and supporting pollination. (If dandelions can't be found in environment you could consider purchasing wild flower seeds to illustrate the process.)
- Using the seed dispersing experience learners should discuss the authors choice of alternative names for a dandelion i.e., 'Windblow', 'Parachute', 'Scatterseed' and consider why these words may have been used.

#### Plenary: (Review and recall)

• After examining the plant (in real life, illustration in text or photograph) highlight all the different names this plant has. In pairs or small groups encourage learners to create another name for the dandelion. Use the routine 'Round Robin' for pairs or groups to feedback their chosen name and explain why they chose it.

Additional Resources/Digital Links	Explore links with other curricular areas		
Dandelion Time Lapses https://www.youtube.com/watch?v=UQ_Q qtXoyQw https://www.youtube.com/watch?v=kOAB CH51KnQ	Numeracy Measuring lengths of dandelions stems (Numeracy) Estimations – how far will the dandelion seeds go when you blow them? How many seeds are	Social Studies, Science, RME etc. SOC 1-13a Dandelion mark making – printing Science – life cycles of a dandelion	

in one dandelion?

#### **Learning Intentions:**

To make links with my experiences to enhance my understanding of a text.

#### **Success Criteria:**

- Talk about and use my own experience to help make sense of a text.
- Talk about an authors word choice.
- Take part in a human seed dispersal.

#### **Effective Questions:**

- What is the poem about?
- What part do you like best and why?
- What does the author mean by...?
- Why did the author choose the word... to describe the dandelion?
- How does the painting make you feel?
- · What makes you think that?

#### **Sustainable Development Goals:**

Goal 15: Life on Land

- I can show my understanding of what I listen to or watch by responding to and asking different kinds of questions. LIT 1-07a
- To show my understanding, I can respond to different kinds of questions and other close reading tasks and I am learning to create questions of my own. ENG 1-17a



# Learning for Sustainability: The Lost Words: BRAMBLE - Primary 3

**Key Vocabulary:** bramble, march, rolling, arching, hedges, city, edges, snarled, briar, moths, millions, thorns, flutters, looped, shutters, shoots, keyholes, empty, stairwells, blackberries, light, falls.

#### Introduction: (Connect the learning)

- Share the title of poem with learners: BRAMBLE ask what do they <u>already</u> know? What do they imagine? What do they want to know?
- Show learners the double page illustration from the book and use thinking routine 'Zoom In' to encourage learners to focus on details within the illustration and talk about what they can see. Can learners identify any animals and creatures within the illustration? House sparrow, blackbird, wren, woodland brown butterfly, coal-tit, bank vole.
- Share the poem and read aloud as a class investigating key vocabulary.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

• After reading the poem support learners to identify words used to describe brambles using clues from the text; 'arching', 'thick', 'thorns', 'looped', 'wire', 'little shoots', 'bright'. It is unlikely that brambles will be found in your outdoor environment, you may wish to bring in some berries or share some pictures. Encourage learners to look further at the illustration – who might eat the berries? How might they taste?

"Bramble flowers are a food source for honey bees and bumblebees and other wild animals. Leaves are eaten by certain caterpillars as well as some grazing mammals, especially deer. Ripe berries are eaten and their seeds dispersed by several mammals such as fox and badger, and small birds. Bramble is also a habitat for some animals, including grass snakes." <a href="https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/plants/wild-flowers/bramble/">https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/plants/wild-flowers/bramble/</a>

- Invite learners to explore their outdoor environment using their senses, thinking of what they can see, hear, feel, smell and taste.
- Ask learners to imagine they are one of the animals within the illustration in the text, they should locate a place in
  their environment that this animal may be found. Invite learners to sketch or draw a representation of what they
  would be able to see from this view point, learners should consider colour, shape, and texture when representing
  their five senses in their drawing. Learners could be encouraged to use 'natural' paints such as crushed berries, mud,
  leaves, petals etc.

#### Plenary: (Review and recall)

• Learners should discuss, with a partner, their artists impression from the point of view of one of the animals in the bramble illustration. Describe what they would see, hear, taste and smell. Learners should be encouraged to ask their partner questions about details of their drawing.

Additional Resources/Digital Links	Explore links with other curricular areas	
Time Lapse <a href="https://www.youtube.com/watch?v=OdMz">https://www.youtube.com/watch?v=OdMz</a> <a href="https://www.youtube.com/watch?v=OdMz">NW9aLZO</a>	Numeracy Measuring the acorn (maths)	Social Studies, Science, RME etc.  Art – creative challenge – leaf printing.  Technology – making instruments

#### **Learning Intentions:**

To share my thoughts and ideas with others. To ask questions if I need more details.

#### **Success Criteria:**

- Use my imagination to create an illustration from the point of view of an animal.
- Use my senses to describe the world from the point of view of an animal.
- Ask questions to encourage my partner to elaborate on thoughts and ideas.

#### **Effective Questions:**

- What is the poem about?
- What part do you like best and why?
- Which creatures eat brambles?
- I wonder what the blackbird can see?
- I wonder if the vole will hear the same as the wren?
- I wonder how the thorns would feel for the sparrow or butterfly?
- Can you tell me more about what the... can hear?

#### **Sustainable Development Goals:**

Goal 15: Life on Land

- When listening and talking with others for different purposes, I can exchange information, experiences, explanations, ideas and opinions, and clarify points by asking questions or by asking others to say more. LIT 1-09a
- When I engage with others, I know when and how to listen, when to talk, how much to say, when to ask questions and how to respond with respect LIT 1-02a

## Learning for Sustainability: The Lost Words: MAGPIE - Primary 4

Key Vocabulary: manifesto, toss, bicker, yak, snicker, interrupt, interject, intercept, intervene, creeping

#### **Introduction: (Connect the learning)**

- Share the title of poem with learners: MAGPIE what do they <u>already</u> know? Where would they expect to see it? Share and examine the illustration from the book, encourage learners to share their experience of seeing these birds in their environment.
- Share the poem with learners and read aloud as a class investigating key vocabulary

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- Within your outdoor environment locate a quiet area for learners to sit and observe/listen to their surroundings. Encourage them to tune into listening for birdcall or observing birds, in particular magpies. (Videoclip of magpies could be used if real experience is not possible).
- Refer back to the vocabulary in the poem and discuss the word choice of the author for describing
  the magpie, support learners in identifying nouns, adjectives and verbs; 'gossip', 'bicker', 'fight',
  'interrupt', 'interject', 'walking', 'creeping', Invite learners to reflect on what they observed/heard,
  do these words (nouns, adjectives and verbs) relate to their experience?
- In pairs or small groups, learners will create a kenning (using a two-word phrase in the place of a one-word noun) to describe a magpie or animal of their choosing. Learners should be encouraged to think about the following: what does the animal do? How does it move? What does it eat? e.g., magpie playground-creeper, tree-hopper, cat leg-rubber, soft-purrer, bee nectar-seeking, fierce-buzzer.
- Learners can record their kennings in a format of their choosing e.g., written, video, voice note.

#### Plenary: (Review and recall)

- Invite pairs or small groups to share their kennings with the class. Can other learners identify the animal from the descriptions?
- Encourage learners to offer further suggestions of kennings to describe the chosen animals.

Additional Resources/Digital Links	Explore links with other curricular areas	
Clip of Magpie Call https://www.youtube.com/watch?v=K z4SvP0c_VE	Numeracy	Social Studies, Science, RME etc. SOC 1-07a

#### **Learning Intentions:**

To use descriptive vocabulary to link ideas.

#### **Success Criteria:**

- Describe an animal using nouns, adjectives, and verbs.
- Create a kenning about a familiar animal.

#### **Effective Questions:**

- What part do you like best and why?
- What does the author mean by...?
- I wonder why the author described the magpie as...?
- What can you picture in your head when you hear the poem read aloud?

#### **Sustainable Development Goals:**

Goal 15: Life on Land

- As I listen or watch, I can identify and discuss the purpose, key words and main ideas of the text and use this information for a specific purpose. LIT 1-04a
- By considering the type of text I am creating, I can select ideas and relevant information, organise these in a logical sequence and use words, which will be interesting and/or useful for others. LIT 1-26a



# **Learning for Sustainability: The Lost Words: ACORN – Primary 5**

**Key Vocabulary:** acorn, flake, curve, knot, one, coin, bird, rock, drop, spring, glint, near, wind, feather, light, kindness, blizzard, sphere, net, many, money, flock, mountain, fountain, river, glitter, far, weather, star, good, wood,

#### Introduction: (Connect the learning)

- Show the ACORN illustration from the book and use the thinking routine 'Explanation Game' to encourage learners to consider what they can see and what its function is. Share the title of the poem with learners, ACORN to establish if any suggestions were accurate
- Share the poem with learners and read aloud as a class investigating key vocabulary.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

• Invite learners to try to find acorns in their outdoor environment? Discuss where they might be found, what clue is in the poem? 'as acorn is to wood'. Acorns may be found on trees or on the ground discuss why?

"Acorns are the fruit of the oak tree. They contain the seeds that can grow new oak trees, and falling to the ground is part of the tree's lifecycle – this is how it reproduces. Having reached the ground, the acorns can grow into new oak trees or be carried off to new locations by wildlife." <a href="https://www.woodlandtrust.org.uk/blog/2019/09/are-acorns-edible-and-other-acorn-facts/">https://www.woodlandtrust.org.uk/blog/2019/09/are-acorns-edible-and-other-acorn-facts/</a>

- Read the poem aloud for a second time this time encouraging learners to identify the connecting nouns e.g. 'flake' 'blizzard', 'bird' 'flock', 'rock' 'mountain', 'acorn' 'wood'. You may wish to have nouns pre-printed, give a noun to each learner and invite them to find their connecting noun. To challenge, encourage learners to hide their noun, each learner must describe their noun in order to find their match.
- Invite learners to explore their outdoor environment and collect a range of materials, these maybe natural or not. In pairs or small groups learners should identify/generate connecting nouns e.g., petal flower, grass blade, leaf tree.
- Learners should use their found items and connecting nouns to create their own poem using a similar structure to the acorn poem. E.g., As **petal** is to **flower**

As **leaf** is to **tree** 

As ... is to ...

#### Plenary: (Review and recall)

• Invite pairs/small groups to share their poems, encourage learners to provide feedback e.g., 2 stars and a wish.

Additional Resources/Digital Links	Explore links with other curricular areas	
iPad Squirrels stealing acorns <a href="https://www.youtube.com/watch?v=YcdSmfXdbMo">https://www.youtube.com/watch?v=YcdSmfXdbMo</a>	Numeracy Measuring the acorn (maths)	Social Studies, Science, RME etc. Art – creative challenge – leaf printing. Technology – making instruments

#### **Learning Intentions:**

To explore the technique and structure of a poem to engage readers.

#### **Success Criteria:**

- Locate nouns in a poem.
- Discuss how they connect/link to one another.
- Use this technique to structure my own poem.

#### **Effective Questions:**

- What is the poem about?
- What part do you like best and why?
- How does the structure engage the reader?
- Have you ever used a similar technique?
- How do the nouns connect?

#### **Sustainable Development Goals:**

Goal 15: Life on Land

- I can: discuss structure, characterisation and/or setting, recognise the relevance of writers theme and how this relates to my own and others' experiences, discuss writers style and other features appropriate to genres. ENG 2-19a
- I am learning to use language and style in way which engages and/or influences my reader.
   ENG 2-27a
- Having explored the elements which writer use in different genres, I can use what I learn to create stories, poems and plays with an interesting and appropriate structure, interesting characters and/or settings which come to life. ENG 2-31a



# Learning for Sustainability: The Lost Words: KINGFISHER - Primary 6

**Key Vocabulary**: kingfisher, fire-bringer, flame-flicker, quiver, gleaming, snag, gold-flare, whipcrack, carves, hollow, slings, stickleback, shrimp, minnow, halcyon, ripple-calmer, angler, rainbringer, alight

#### Introduction: (Connect the learning)

- Share the title of poem with learners: KINGFISHER what do they <u>already</u> know? Where would they expect to see it? What do they imagine?
- Share the poem with learners and read aloud as a class investigate key vocabulary whilst observing the illustration.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- Invite learners to share an experience of seeing kingfishers before? Where did/would they see them? You could watch a video of kingfishers prior to taking the learning outdoors.
- Invite learners to work individually or collaboratively to create a collage of a kingfisher using materials found and collected within their outdoor environment. Learners should create their own artistic, abstract image of a kingfisher and be encouraged to consider how they can bring the descriptive words and phrases used by the author into their representation colour-giver, flame-flicker, gleaming, gold-flare, arrow, rainbow, glitter. Take note of the colours, shapes, and textures of the image you have created.
- Encourage learners or small groups to look at the similarities and difference between their creations, and the illustration in the book. Learners should provide feedback to one another, by being a critical friend, and be ready to challenge one another and consider: what worked well? What might they change? Why did they use the materials that they did? It would be even better if...

#### Plenary: (Review and recall)

• Further examine the double-page spread illustration of the kingfishers within the book: Using the thinking routine 'Step Inside' encourage learners to pick one of the kingfishers and discuss: What can the kingfisher see, observe or notice? What might the kingfisher care deeply about? What might the kingfisher wonder about or question? What might the kingfishers be saying to each other? Learners may wish to challenge each other opinions e.g., why do you think that?

"Most kingfishers die of cold or lack of food a severe winter can kill a very high percentage of the birds. Despite high breeding productivity, populations can take many years to recover from a bad winter. Weather conditions in the summer can also cause significant mortality. Cold weather or flooding in the summer can make fishing difficult, resulting in starvation of the brood, while flooding can also claim many nests." <a href="https://www.rspb.org.uk/birds-and-wildlife-guides/bird-a-z/kingfisher/threats/">https://www.rspb.org.uk/birds-and-wildlife-guides/bird-a-z/kingfisher/threats/</a>

• Encourage learners to reflect on the current climate change crisis and the impact this may have on Kingfishers.

Additional Resources/Digital Links	Explore links with other curricular areas	
Photographs of Kingfishers. Kingfisher fishing https://www.youtube.com/watch?v=v eQ2ilQrzMU iPad – to capture creations	Numeracy	Social Studies, Science, RME etc. SCN 2-01

#### **Learning Intentions:**

To offer own viewpoint and challenge another's viewpoint appropriately.

#### **Success Criteria:**

- Share my process and justify why I used particular materials to represent the author description.
- Challenge my partner by asking questions in an appropriate way.

#### **Effective Questions:**

- What part do you like best and why?
- What does the author mean by...?
- Can you tell me why you used...?
- How would you describe a kingfisher to someone who has never seen one before?
- What evidence from the poem can you use to support your description?
- Why do you think that?

## **Sustainable Development Goals:**

Goal 13: Climate Action Goal 15: Life on Land

- When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking. LIT 2-02a
- I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience. LIT 2-06a
- I am developing confidence when engaging with others within and beyond my place of learning. I can communicate in a clear, expressive way and I am learning to select and organise resources independently. LIT 2-10a



# **Learning for Sustainability: The Lost Words: OTTER – Primary 7**



**Key Vocabulary:** falter, supple, holt, shape-shifter, sheer, breath-taker, shadow-flutter, skein, swift, silver-miner, trout, ore, bores, delves, up-current, shimmering, twister

#### **Introduction: (Connect the learning)**

- Share the title of the poem with learners: OTTER what do they <u>already</u> know? Where would they expect to see it? What do they imagine?
- Share the illustration from the book and use the thinking routine 'I see, I think, I wonder' to encourage learners to examine it.
- Share the poem with learners and read aloud as a class investigating key vocabulary, in particular 'shape-shifter'.

#### Development: (Learners are actively involved in their learning and demonstrate learning)

- Have you ever seen an otter before? Where did/would you see them? (You may wish to share a videoclip
  of otters prior to taking the learning outdoors). Discuss the author's choice of movement words with
  learners; 'supple slider', 'shape-shifter', 'breath-taker', 'swift swimmer', 'thunderbolter', 'shimmering
  twister',
- Invite learners to choose a creature they'd like to shape-shift into. In pairs or small groups learners should
  generate a collection of movement words which relate to their chosen animal using a words race (taking
  turns to state a word associated with the chosen animal). Pairs/small groups should consider the authors
  technique of using descriptive language (similes, metaphors, kennings) to create imagery and add to their
  movement words e.g., seagull danger diving, wing flapping, playground scavenging. Encourage pairs or
  small groups to act out their descriptive phases.
- Invite pairs or small groups to partner up with another and use the movement phrases to instruct the other group how to move. Can the group work out the animal being presented?
- Learners could film their movement piece adding an audio voice over to describe their creatures.

#### Plenary: (Review and recall)

- After examining the otter (in video, illustration in the text or photographs) discuss the movement in the painting. How has the illustrator captured the otters movement as described in the poem.
- Extension: Learners could illustrate their chosen animal to accompany their movement film and description.

Additional Resources/Digital Links	Explore links v	Explore links with other curricular areas	
Photographs of Otters. Up close with otters <a href="https://www.youtube.com/watch?v=SI">https://www.youtube.com/watch?v=SI</a> WbjgPYcJY iPad — to record pupil's movement pieces and audio voice overs.	Numeracy	Social Studies, Science, RME etc. SCN 2-01a	

#### **Learning Intentions:**

To use descriptive language and imagery to bring an animal to life.

#### **Success Criteria:**

- Identify animal movements and words to describe them.
- Use descriptive language to paint a picture of the animal in my partners mind.
- Listen to descriptive phrases and act them out.

#### **Effective Questions:**

- What is the poem about?
- What part do you like best and why?
- What does the author mean by...?
- I wonder how the author feels about the otter?
- How does the illustrator capture the authors description of the otter?

#### **Sustainable Development Goals:**

Goal 15: Life on Land

- I am learning to use language and style in a way which engages and/or influences my reader. LIT 2-27a
- Having explored the elements which writers use in different genres, I can use what I learn to create stories, poems and plays with an interesting and appropriate structure, interesting characters and/or settings which come to life. LIT 2-31a





# Visible Thinking Routines



# Thinking Routines and Active Learning Approaches



## **Concept Map**

This thinking routine allows practitioners to capture learners prior knowledge, thinking and questions about a topic. With younger learners you may wish to incorporate illustrations to support their ability to recall and revisit the map.

#### **Doodle It**

Learners draw their response/idea to a question or topic of conversation. They then talk about what they have drawn.

### Beginning, Middle, End

- Learners study an illustration or piece of artwork and respond to the following questions:
  - If this illustration is at the beginning of the story, what might happen next?
  - If this illustration is in the middle of story what might have happened before? What might happen next?
  - If this illustration is the end of the story what might the story be about?

#### **Placemat**

This routine encourages learners to share knowledge, ideas and questions about a topic/problem around the edges of the placemat. Agreed questions or responses about the topic/problem are recorded in the centre of the placemat.

#### **Headlines:**

Learners consider the big ideas from their learning. They then compose a headline for the learning that captures the key points or point. This routine asks children to analyse the topic at hand and summarise it into a single headline. Keeping a record of this provides an insight to children's thinking at a given point in the topic.

Visible Thinking; Project Zero. Harvard Graduate School of Education

http://www.pz.harvard.edu/projects/visible-thinking





# Thinking Routines and Active Learning Approaches (cont.)



### Mix, Pair, Share

The class are given a 'topic' to think about. The teacher calls 'Mix' – learners wander around class thinking about an answer to the posed question. Teacher calls 'Pair' – learners turn to the person closest to them ready to share (if no one is beside them invite them to put up their hand and find someone else with their hand up to pair with). Teacher calls 'Share' – take turns to share ideas/answers.

#### **Take Note**

- After leaners have viewed a film, read text or engaged in discussion learners should respond to ONE of the following questions to demonstrate their understanding of a topic:
  - What is the important point?
  - What are you finding challenging, puzzling or difficult to understand?
  - What question would you most like to discuss?
  - What is something you found interesting?

#### Zoom In

Learners look closely at a small section/magnified image that is revealed, inviting them to share their thinking: What do you see or notice? What do you think this image might be of/about? Reveal more of the image and ask: What new things do you see? How does this change your original thoughts? Has the new information answered any of your wonders or changed your previous ideas? Repeat the reveal and questioning until the whole image has been revealed. Finally, ask learners, what new things are you wondering about?

### Think-Puzzle-Explore

- This routine helps to activate learners prior knowledge and provoke curiosity for enquiring more about a topic by answering the following questions:
  - What do you think you know about this topic?
  - What questions or **puzzles** do you have about the topic?
  - What does the topic make you want to explore?



# Thinking Routines and Active Learning Approaches (cont.)



#### The 3 Y's

- This routine helps learners to place themselves and others into a situation, topic or issue by keeping global, local and personal connections in mind through answering the following questions:
  - Why might this topic matter to me?
  - Why might it matter to people around me?
     e.g., family, friend, city, nation
  - Why might it matter to the world?

### **Compass Points**

- This routine helps learners to share their thoughts and ideas about a topic by responding to each of the points on the compass:
  - Excites What excites you about this idea/topic?
  - Worries What worries you about this idea/topic?
  - Need to know What else do you need to know or find out about this idea/topic?
  - Stance What is your stance/opinion on this idea/topic?

### 4 C's

- In response to a text, learners consider:
  - Connections: What connections can you make between the text and your own life?
  - Challenge: What ideas do you disagree with or wish to challenge?
  - Concepts: What key ideas in the text do you think are important and worth holding on to?
  - Changes: Does the text suggest any changes in attitudes, thinking or actions for you or others?

#### **Circle of Actions**

This routine helps learners consider responsible actions and make connections between them as individuals and the wider world by responding to the following questions:

What can I do to contribute...

- in my inner circle? (friends, family)
- in my community? (school, neighbourhood)
- in the world? (beyond my immediate environment)





# Thinking Routines and Active Learning Approaches (cont.)



### I see, I think, I wonder:

Look at an image or object inviting learners to share their thinking: What do you see? What do you think is going on? What does it make you wonder? The purpose of this routine is to help raise questions which could be used to guide pupil enquiry. Thinking should be shared and noted at each stage in the discussion, so it can be added to.

#### Think, Pair, Share:

Ask each learner to write/think of as many answers, ideas or suggestions as they can on their own. Students then pair up to pool ideas with a partner, and finally share ideas either in a larger group or within the class as a whole, with the teacher guiding the discussion.

#### **Round Robin**

This thinking routine gives all learners an opportunity to share their prior knowledge, ideas and questions. Each learner takes a turn to respond to a question or statement posed.

## **Step Inside**

- This thinking routine encourages learners to think about a person or an object that is part of or connected to the event or situation you are examining. Learners place themselves within the event or situation to see things from this point of view and could respond to the following:
  - What can this person or thing see, observe or notice?
  - What might this person or thing know, understand, hold true or believe?
  - What might this person or thing care deeply about?
  - What might this person or thing wonder about or question?

## **Explanation Game**

- Learners look closely at an object/illustration which they are trying to understand:
  - Name it
  - Explain it. What could it be? What might it do?
  - Give reasons. What makes you say that?
  - Generate alternatives. What else could it be? What makes you say that?





# **Additional Resources**

# Early Level

- <u>Learning Environment</u> and <u>examples</u>
- Interactive Shared Reading Approach
- Sparkle Words and Key Vocabulary
- HOTS Questioning and 5 Finger Retell
- Additional Book Suggestions
- Winston's Letter and Photograph from Winston
- Climate Action

# First Level

- <u>Title page Beginning, Middle, End</u>
- Before Reading Strategies
- Front cover and inside spread
- Picture Inference and book extract
- Circle of Viewpoints/Hot seating
- Persuasive Writing Poster

# Second Level

- Zoom In starter images
- Question for thinking/discussing
- Word Art
- Key Vocabulary
- Before, During and After Watching Strategies
- <u>Diamond 9</u> and <u>template</u>
- Jigsaw Activity
- The Campbell's and a sustainable day

# Third Level

- Starter image
- Concept Map
- <u>+1 Routine</u>
- <u>Search-Pair-Share</u>
- Plenary
- <u>Plenary wheel template</u> and <u>example</u>





# **Early Level Resources**





# **Learning Environment**

It is important to set up a rich learning environment to support the context for learning around the book, Winston of Churchill, One Bear's Battle Against Global Warming.

Create a **Learning Environment** to support literacy with a Climate Change focus:

- copy of book
- polar bear toy (Winston)
- small, medium and large blocks covered in white paper to represent 'icebergs'
- Tuff tray of ice blocks
- placards with messages from the book
- labels to encourage changes around the nursery which will help Winston
- visual representation/chart where staff and children can recognise and celebrate their collaborative efforts of taking action for example, adding a symbol such as a light bulb to acknowledge that a child has remembered to switch off the lights when leaving a room.

# Chlocking Loathing

## **Learning Environment Examples**





Use blocks and material to create an iceberg for the polar bear – **BIG** iceberg



Take some of the blocks away to make the iceberg smaller – **MEDIUM** iceberg



Use only a **few small blocks** to create a very **SMALL** iceberg for the polar bear



Use **small world** for imaginative play – animals and people



Create a **role play prop box** filled with fur material, white and blue material, furry hats, placards etc.



Water tray filled with ice – observe melting!



# Interactive Shared Reading



### **Interactive Shared Reading**

Interactive shared reading is an approach intended to support children's engagement and understanding of stories. These sessions should be planned and include multisensory opportunities for children to interact with a text.

In small groups, children should have the chance to revisit and hear the same story on several occasions. Adults should use think alouds and effective questions to encourage thinking and conversation whilst remembering to follow the child's lead to enable sustained interactions.

Through interactive shared reading children will develop awareness of book handling skills and concepts of print whilst exploring story elements and story structure to support their comprehension.



### First read - strategies and approaches

**Purpose**: To introduce the book and enable children to hear the whole story. Conversations should not affect the story's 'flow'.

#### **Before reading:**

- You may wish to draw children's attention to **some key features** of the book e.g., title, author, illustrator, front cover, blurb.
  - "Let's read the blurb. What does it tell us about the story?"
- Use the front cover/title to encourage children to make predictions about the book.

"Tell me about the front cover. What do you see?"
"What do you think the story might be about?"

- Children may be able to identify who the main character might be, the problem that may arise or the setting of the story e.g.,
  - "I am trying to visualise where this story might take place, I wonder if anyone else can..."
- To reinforce book handling skills you may wish to point to the word where you will start reading.

### **During reading:**

### Flow of story

- Read aloud to group (use comments and questions at natural breaks)
- Trace finger under some words
- Shorter conversations
- Encourage predictions "I'm wondering about..."
- Emphasise new vocabulary

#### After reading:

#### **Develop Understanding**

- Talk about the book using story elements (character, setting, problem, actions, resolution) and story structure (beginning, middle and end).
- Ask 'why' questions Who (character)? Where (setting)? What (action/big problem/resolution)? Why (explaining/understanding)? E.g.,

"I'm trying to understand why (insert scenario) happened?"
"I'm wondering why (insert character's name) did that?"

• Leave a copy of text in library with story props to reinforce the story.



# Interactive Shared Reading



#### Subsequent reads - strategies and approaches

**Purpose:** To develop comprehension and extend thinking skills by engaging children in longer conversations.

### Before reading: Prior knowledge

- Recap story elements from last session and discuss any new vocabulary.
- To reinforce book handling skills you may wish to point to the word where you will start reading.

#### **During reading:**

#### Comprehension

- · Ask more questions to develop understanding.
- Use think alouds **followed by** questions e.g.

"I'm wondering if..."
"What would you...?"

- Strive for 5 turns in conversations. Discuss characters' thoughts and feelings, refer to illustrations to provide clues for children.
- Encourage children to make connections with the story and their own experiences, thoughts and feelings e.g.,

"What does this story remind you of?"

"Has anything in the story ever happened to you? Would you like to share it?"

"What might you have done in \_\_\_\_\_'s situation?"

• Use 'shooting for the SSTARS' to make words 'sparkle'.

#### After reading:

#### **Develop thinking**

 Have conversations about the resolution to the problem. Continue to ask why questions e.g.,

"What do you think about...? Why?"

• Encourage children to explore characters' **thoughts** and **feelings**, imagine and project e.g.,

"What would you say if you were...? Why?"

"Why do you think the character has been drawn like this?

• Ask about secondary characters' thoughts and feelings, encouraging children to explain their ideas.

### Final read - strategies and approaches

**Purpose**: To help children retell or read the story using illustrations and/or props as an aid.

#### Before reading:

#### **Prior knowledge**

- Ask children to recall the title, characters and setting and ask about the big problem in the story.
- · Review any new 'sparkle words'.
- Explain that the children are going to 'read' the story. You won't read all the text, just the parts of it that children need help with.

#### **During reading:**

#### **Encourage details**

 Support children to retell the story (events, reasons why, thoughts, feelings) with think alouds, question prompts and illustrations/props e.g.,

"What happened on this page?" "What's happening here?" "Why did this happen?" "What is she thinking/feeling here?" "What will he do next?"

- Encourage use of details names, objects, feelings and reasons.
- Observe and encourage children to use new 'sparkle words'.
- Reread parts of the text if needed to secure understanding.

#### After reading:

### Encourage thinking

- Develop conversations by following the children's lead.
- Continue to expand understanding by asking children to make connections, use their imagination (e.g., alternative ending) and make predictions e.g.,

"Think of a time when you... What would have happened if vou...?"

• Encourage all children to contribute by striving for five interactions. Invite children to comment on others children's suggestions.



# Sparkle Words

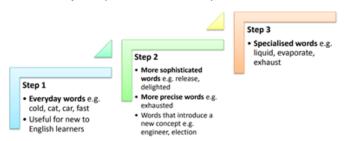


### **Sparkle Words**

Supporting and building vocabulary are key to developing children's language and communication skills. Sparkle words is an approach for making the exploration of vocabulary a natural part of book sharing sessions and everyday conversation.

When planning a book sharing session (see interactive shared reading session):

- Review the book and select the best sparkle words (focus vocabulary) you wish to draw children's attention to. These may be words of interest or important words children need to know in order to understand the text.
- Select no more than five focus words per book.
- Ensure that there are a variety of words; nouns, adjectives, verbs and adverbs.
- Consider the three-step approach to introduce children to more complex and subject specific vocabulary.



- Plan how you will explain and bring the sparkle words to life to ensure children understand their meaning.
- Encourage children to highlight words interested them or are new to them.
- Seek opportunities to use and reinforce the sparkle words in a range of different contexts.

### **Shooting for the SSTARS**

Vocabulary development is essential in the early years, but it is not just the number of words a child knows that is important but how well a child understands these words.

Shooting for the SSTARS is a strategy you can use to support children's understanding of new vocabulary.

**Stress** a new word before, during and after reading to focus

children's attention.

**Show** children what the word means by pointing to an illustration,

using your facial expressions, acting it out or altering how you say

the word.

**Tell** children what the word means by giving a simple definition, using

other words which mean the same or talking about the group or

category the word belongs to, if appropriate.

and

Relate

**Relate** the word to children's own knowledge, experiences or

familiar situations and talk about other words with a similar

meaning or an opposite meaning.

Say it again Read the book again and again allowing for more conversation

relating to the new word and use the 'sparkle word' throughout the setting in different contexts. Hearing the word repeated is essential for children to be able to adopt and use this vocabulary

in their own interactions.

**Example:** Sparkle word – *feast* 

. .

**Show** Pictures of a feast e.g., buffet at a birthday/wedding/celebration **Tell** A special meal with delicious food or a large meal for lots people

recall a time when there has been a 'feast' in nursery, e.g., Christmas lunch. Share a time when you have had a 'feast' at a

celebration. Ask children, "have you ever had a feast?"

Say it again Seek opportunities to use the word through play e.g., house

corner, "shall we make a feast for the family" or whilst exploring other stories e.g., "The Very Hungry Caterpillar had a feats on

Saturday."



# Key Vocabulary



pollution		march	tundra
climate	courage		protest
climate change	habitat	gases	3
melting	1	action	atmosphere



# **HOTS Questioning**





list, tell, describe, name, recite, show, recall, repeat, quote...

- What happened before... after...?
- How many ...?
- What is ...?
- Who was it that ...?
- When did ...?
- Who did ...?
- What did ...?
- Why did ...?
- Who spoke to ...?

Remembering

Compare, identify, sequence, research, categorise, explain...

- How would you sort/classify...?
- What was the problem with...?
- How is ... similar to ...?
- Which part of the story was the funniest/ saddest...?
- How did...?
- How would...?
- When did...?
- Can we find out...?

Analysing

select, choose, decide, discuss, prioritise, recommend, judge...

- Do you think ... is a good or bad thing?
- What changes to ...would you make?
- Did ... make the right choice?
- Why did they choose ...?
- Would you have..?
- Why were..?
- How would you feel if...?
- Do you believe..?

Evaluating

explain, predict, describe, report, observe, identify, give examples

- Tell me in your own words what happened?
- How would you explain ...?
- Who do you think ...?
- Tell me what happened first/next/after...?
- What did he/she look like?
- Why did...?
- · Where did?

Understanding)

act out, draw, sort, construct, use, complete, solve, collect...

- What questions would you ask?
- . Can you show me ...?
- · Can you tell me which ...?
- Why did...?
- Can you sort...?
- Can you finish...?
- Can you construct...?

**Applying** 

imagine, create, design, plan, construct, invent, improve, predict

- What would you do if?
- . What could ... do instead?
- How could you change the ending?
- How could you design / invent a new way to ...?
- How would you explain/describe /show...?
- What could happen if 🚅
- What other way could you...?

Creating

I can use the information to build new ideas

I can say what I think about the information and back up my opinion.

I can break down the information to understand it better.

I can use the information in a new way.

I can explain the ideas in the information.

I can remember facts about the information.





# Five Finger Retell







# **Additional Book Suggestions**

- Polar Bear, Polar Bear, What Do You Hear Eric Carle
- The Rainbow Bear Michael Morpurgo
- The Polar Bear and The Snow Cloud Jane Carbrera
- The Last Polar Bear Jean Craighead George
- Big Bear, Little Bear David Bedford and Jane Chapman
- The Lonely Polar Bear Khoa Le



# **Example Letter from Winston - Template**



Dear .....

Winston of Churchill Ice of Hudson Bay Churchill Manitoba Canada

Date: .....

I am writing to you today to help me solve a very big problem that we the polar bears have. We live on the ice of the Hudson Bay and go hunting on the ice for food. But the ice is melting because of global warming and if this keeps happening then we will have nowhere to live or find food. I have sent you a photograph of one of my friends sitting on the melting ice – he was very annoyed that this was happening and had to swim a great distance to get back to his family. He was exhausted when he got back.



I am asking you for help to save the ice so we polar bears can keep on living on it. It takes courage to make the changes needed to do this but I am sure if we all work together we can make changes to help stop the ice melting.

Can you think of some ways you can make a change to help save the ice from melting? We need your help to spread the word.

I must get back to the protest march I have organised with the other polar bears as there is a group of tourists visiting the tundra later today.

I know I can count on your support and thank you for your help. Remember never give up! We can all do something no matter how small.

Yours sincerely

Winston

Winston of Churchill Polar Bear Leader





# Photograph from Winston







# Climate Action



The earth has some gas around it that holds in the heat of the sun.

It's called the atmosphere.

If you get too much of some of these gases.

the heat near the earth gets stuck and the earth heats up.

### WHY IT'S GETTING HOTTER

by Winston of Churchill Manitoba, Canada, North America, Earth







Burning gasoline in cars makes carbon dioxide.

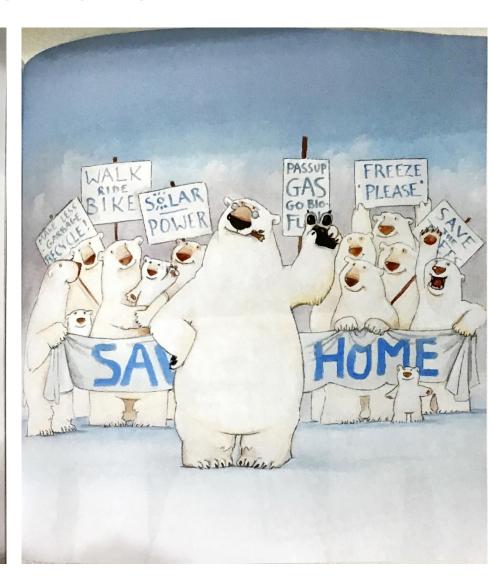
Methane gas comes from rotting garbage in landfills.

Digging for oil and natural gas and mining coal lets out a gas called nitrous oxide. Too much of these gases is no good.



But green plants turn carbon dioxide into oxygen, which is very good.

people need to burn less gas, make less garbage, and plant more trees.









# First Level Resources



# Title Page – Beginning, Middle, End



Extract removed for copyright purposes





# Before Reading Strategies

## 1. Before Reading

- Understand the learning intention/success criteria
- Ask yourself questions
- What kind of text am I reading?
- Is it fiction or non-fiction?
- What can I predict from the title, the picture, the blurb and the author?
- What can I picture in my head from the title?
- What do I know already about this type of text?
- What do I know already about this topic?
- What do I want to find out?
- Talk to your reading partner







# **Front Cover**

Extract removed for copyright purposes





# Inside spread

Extract removed for copyright purposes





# Picture Inference

Use the questions below to encourage learners to search for answers hidden in the text. The clues might be in more than one place:

- What can I see in the picture? (clues)
- What questions can I ask?
- What can I infer? (what does this tell me about climate change?)

Example pages 11 and 12:

### Discuss:

- What kind of world have the dragons created? – draw attention to the water level at the bottom of the spread.
- How might the dragons feel now?
   How would you feel?
- Does the change in colour affect the mood/atmosphere?
- What impact has the dragons way of life (illustrated in previous pages) had on climate change?



# Picture Inference



(book extract – pages 11 and 12)

Extract removed for copyright purposes





# Circle of Viewpoints/Hot Seating

### **Circle of Viewpoints**

This is a routine for exploring diverse perspectives.

Brainstorm a list of different perspectives and then use this script skeleton to explore each one.

I AM THINKING OF [the topic] ... FROM THE POINT OF VIEW OF... [the viewpoint you've chosen]

I THINK... describe the topic from your viewpoint. Be an actor - take on the character of your viewpoint.

A QUESTION I HAVE FROM THIS VIEWPOINT IS... ask a question from this viewpoint.

### **Hot Seating**

One person takes the 'hot seat' in role of a character. The audience then asks them questions.

- How are you feeling?
- What are you worried about?
- What do you think the problem is?
- What needs to change?
- What can you do next?

### Wrap up:

What new information do you have about the topic/character that you didn't have before? What new questions do you have?





# Persuasive Writing Poster

What: Persuasive

Non-fiction Writing

Why? To persuade the reader to do or believe something

### How?

- An opening telling the reader what the issue is and why it is important
- Main reasons with most appealing either first or last
- Flattery, words addressing the reader directly
- Bargaining and persuasive language such as alliteration
- Finish by restating the issue

### I can be persuasive about:

- Environmental and social issues
- Events I am organising
- Products for sale
- My personal qualities
- Things I would like to happen
- Things I believe in







# Second Level Resources



# Zoom In – Starter Image 1 of 4







# Zoom In – Starter Image 2 of 4







# Zoom In – Starter Image 3 of 4







# Zoom In – Starter Image 4 of 4







# Questions to promote thinking/discussion



You might want to print the above image for groups of children to annotate with 'I see, I think, I wonder' statements. After the children have completed this task, use the questions below to support your discussion.

- What can you see?
- Can you think of any words that describe a section of the image?
- Does this image make you think of anything you have seen or heard before?
- Why is there dripping at the bottom of the image?
- What are the objects in the water and why are they there?
- How do you think the animals are feeling? Why?
- What do you think the purpose of this image is?
- Have you seen an image like this before?
- How does the image make you feel?



# Word Art



In groups, discuss the word art and highlight:

Purple – words/ phrases that I have heard of and know their meaning

Orange – words/ phrases that I have heard of but are unsure of their

Yellow - words/ phrases that I have not heard of and are unsure of their meaning

\*\*There are 12 different words, each word is repeated several times\*\*

meaning

Word	Meaning	
fossil fuels	A fuel, such as oil and coal, that has been created from the remains of living organisms that died long ago.	
carbons (CO2)	A greenhouse gas which is given off when fossil fuels are burned.	
CO2	Carbon Dioxide.	
environment	The surroundings or conditions in which a person, animal or plant lives.	
carbon footprint	The amount of carbon dioxide someone creates, of ten measured a year.	
climate crisis	Climate crisis is a term describing global warming and climate change and their consequences.	
human activity	Something that people do or cause to happen.	
emissions	The production and discharge of something, especially gas or radiation.	
carbon offset	A project or activity such as, a wind farm or reforestation, that balances out a persons carbon footprint.	
consequence	The result of an action.	
global warming	The overall increase in temperature of the Earth's atmosphere.	



## Before, During and After Watching Strategies



### Before Watching



- Look at the film poster/title/trailer/synopsis
- What can I predict?
- What do I know already about this subject?
- What do I know already about this film genre/cast/director?
- What do I want to find out?
- Listen without pictures visualise
- Watch without sound
- Discuss
- Discuss new vocabulary
- Freeze Frame

### During Watching



- Stop and check for understanding
- Look forwards and backwards
- Discuss
- Make predictions
- · Ask myself questions
- Answer different types of questions
- Analyse: Camera, Colour, Character
- Analyse: Setting, Sound, Story
- Make notes

### After Watching

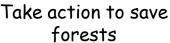


- Summarise
- Change the text into something else
- Discuss with a partner
- Predict what might happen
- Ask and answer questions
- Evaluate the text
- Retell the main ideas
- Have we achieved LI/SC?



# Diamond 9







Save energy



Choose renewable energy



Reduce the amount that you consume



Reuse to reduce your consumption



Recycle



Take alternative modes of transport



Reduce water use



Supporting local wildlife and habitats

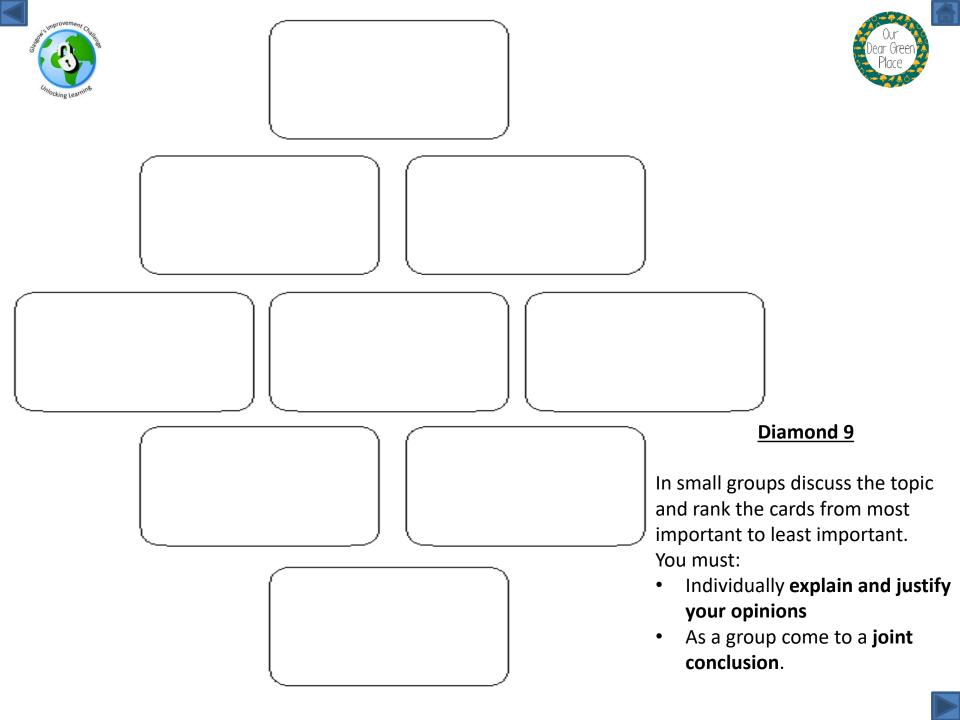


Eat food that is local and in season



Avoid excess packaging







## **Jigsaw Activity**



This video clip provides information about the Jigsaw approach -https://www.youtube.com/watch?v=mtm5 w6JthA

Organise class into jigsaw **home groups** (4 children in each group). Each learner will have one of the following texts:

- Home
- <u>Transport</u> (video clip)
- Food
- Plastic



Learners in each 'home group' will join with learners from other 'home groups' to form jigsaw **expert groups** (e.g., all learners who have 'food' topic meet etc.) Within the 'expert groups' learners will work together to learn about that specific topic (main ideas).

Focus on during reading strategies

- Checking for main ideas
- Thinking about what we already know
- Making connections to their own lives
- Summarising and making notes

Learners return to 'home groups' and take turns to share their learning allowing the work of the expert groups to be disseminated throughout the class.

The teacher should then gather feedback from each group about actions that can be taken to live more sustainably.





# Energy in the Home



Take a moment to think of your home and all the things that use electricity. Lights, TV, computers, fridge, freezer, the list goes on. Is there any way to reduce our energy consumption at home?

What would you do without your TV or devices such as iPads, PlayStation and Xbox? By reducing the amount of time you use these devices or by choosing other ways to entertain yourself, like picking up a book or playing a board game, you can lower the amount of electricity you use in your home. Think of your TV and devices like the lights in your home, when not in use or you leave the room make sure you turn them off, by leaving them on standby you are still using energy.

Does having a shower use up energy in your home? You bet it does. When showering you use up lots of water. How many adults and children are in your home? Each time a person in your home takes a hot shower they are using gas to heat up the water. You should think about how long you shower for. By reducing the amount of time in the shower you not only reduce the amount of water you use but also the energy needed to heat it up. Washing your clothes also needs a lot of hot water. You can save energy by making sure you only put the washing machine on when it is full and setting the temperature low, so the water does not need heated up as much. Doing these things will help reduce your water wastage.

Have you ever taken something out of the fridge and forgot to close the door? When you leave the fridge door open for too long you waste energy because the heat from outside the fridge can enter? The fridge needs to stay at a set cold temperature and this needs energy to do so. By closing the fridge door quickly you can save energy in your home. Just like the fridge door keeps the cold in, your doors in your home can trap the warmth in a room. If you leave the doors open the heat in one room can flow to another. By closing the doors in your home and heating the rooms you are using you can waste less energy.



# **Food Consumption**



30% of your carbon footprint is made up from the food that you eat. For this food to be produced and transported, so it reaches your plate, it needs energy. The more energy it uses the more greenhouse gases will be released into the environment. If you want to know how to reduce your impact on the environment, then knowing how far your food has travelled and how it can be stored or reused can be helpful.

### Food waste

Tonnes of unused food is thrown away each day when it could still be eaten. There are different ways of storing food that can help your food to last longer. By loosely wrapping apples and storing them in the fridge you can help them last up to 2 weeks longer. Is your fruit bashed or bruised? You could use them in your home baking to make an apple pie or banana bread. Potato peelings might seem like they are ready for the bin, try sprinkling them with a little salt and pepper and baking them in the oven to make your own home cooked crisps.

### Food Miles

Do you know where your food comes from? The food that you eat may have been grown and produced in the UK or it may have been transported to the UK from another country. The more mileage your food has taken the higher its carbon footprint. You can find out where some of your food comes from by looking at its packaging. The next time you buy apples or bananas look to see where they have come from.

If you want to lower your carbon footprint from the food you eat try eating food grown in the UK and think of ways to reduce your food wastage.



# Plastic





Plastic pollution is the build-up of plastic particles (small pieces) and objects in the environment such as, bottles, bags and packaging. Plastic pollution can be harmful to the oceans, rivers and land which has a direct effect on wildlife and their habitats.

You can **reduce** the impact of plastic on the environment by carefully considering the products you buy and how to **recycle** them effectively. Many plastic objects are single-use plastics meaning they are made to be used once and then disposed of such as shampoo bottles, crisp packets and food packaging. Some of this packaging has the potential to be recycled multiple times, paper and cardboard can be recycled up to 7 times. Other materials that can be recycled easily are metal and glass.







bottled water

shampoo

crisp packet







plastic bags

cotton buds

food packaging



When you go to the supermarket consider buying products that can be easily recycled like glass jars, and tin cans. You may also want to think about items that you can **reuse** such as bottles.



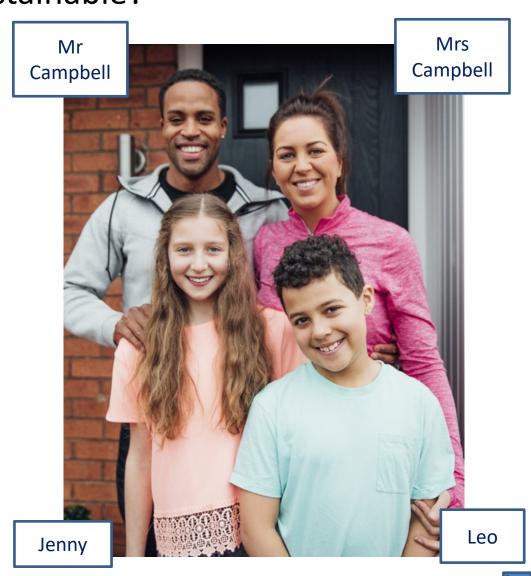
# What can the Campbell family do to be more sustainable?



The Campbell family need help in becoming more sustainable in their daily life.

Read about each family member and think about the sustainable actions you have learned.

What advice would you give each person to help them live a more sustainable life?





# What can the Campbell family do to be more sustainable?





Mr Campbell plays football 2 times a week as part of his fitness plan. Before football, he sits down to his dinner, he is usually running late so lots of his dinner goes in the bin. Mr Campbell is usually hungry when he gets home. After training, Mr Campbell ensures that he puts his kit straight into the washing machine and turns it on even if it is only his kit inside.



Mrs Campbell drives 10 miles into town every day to her work along a popular, very busy road. Her job is highly pressured and she works long hours. After work, Mrs Campbell has little time to prepare for the next day so she often picks up an individual sandwich and a coffee from the local shop next to her work for her lunch every day.



As soon as Leo gets home from school he runs upstairs to his bedroom and switches on his Xbox which he plays for 2 hours before dinner. He often pauses his game and leaves his Xbox on until he has finished dinner, which sometimes takes a while! After dinner he sneaks two packets of crisps upstairs to snack on later.



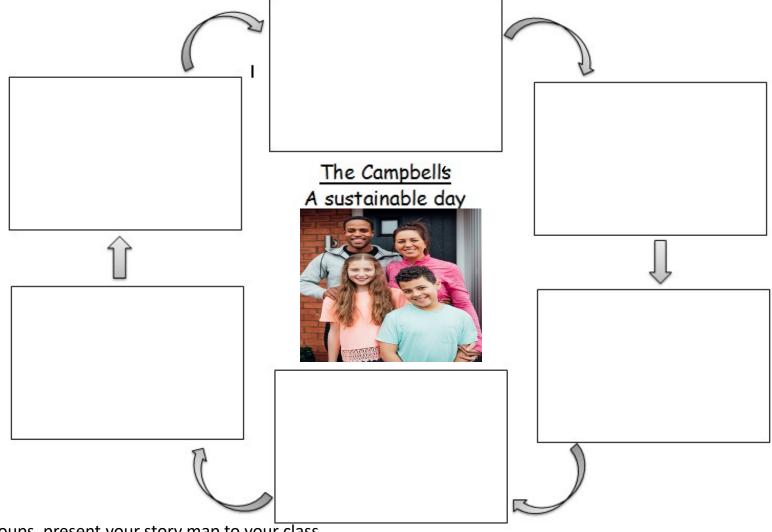
Jenny loves to play outside with her friends. She runs around, playing ball games. She always takes a new plastic bottle of water out with her and a bag of crisps. There is no recycling bin at the park so she puts the rubbish in the general bin. Jenny goes to Brownies every week. The leaders give the children a plastic cup of juice at breaktime. Although the Brownies hall is a five minute walk away, her Dad drops her off by car.



Can you suggest some small changes each family member could make to reduce the family's carbon footprint?



Create a story map in your group that shows a 'sustainable day' for the Campbell's.



In your groups, present your story map to your class.

<sup>\*</sup>Remember: While you are listening to other groups, think about what you can see and hear. Do you have any questions or comments to support or challenge ideas?





# Class Pledge

Miss/Mrs/Mr and pledge to: Primary \_\_\_\_\_

by 20 by 20





# Third Level Resources



# Starter Image







# Concept Map



Where does Carbon Dioxide come from?		How does the planet process $CO_2$ ?
	Climate Change – concept map	
What has lead to changes in our climate?		What is the impact of increased CO <sub>2</sub> levels?



### +1 Routine



A routine for identifying important ideas worth remembering



After reading a text, watching a movie, listening to a lecture, or being presented with new information or ideas in some manner, a group of learners do the following:

Recall

In 2-3 minutes and working individually, each learner generates a list of key ideas that he or she recalls from the presentation that he/she feels is important to hang onto. Learners do this from memory rather than reviewing notes or material.

Add (+) 1

Learners pass their papers to the right. Taking 1-2 minutes, each student reads through the list in front of him/her and **adds one** new thing to the list. The addition might be an elaboration (adding detail), a new point (adding something that is missing), or connection (adding a relationship between ideas). **Repeat** this process at least two times.

**Review** 

Return the papers back to the original owner. Learners read through and review all the additions that have been made on their sheets. At the same time they may add any ideas they have picked up from reading other's sheets that they thought were worthwhile.

Project Zero, Harvard Graduate School of Education: Visible Thinking initiative





# Search-Pair-Share



Search-Pair-Share is a collaborative learning strategy that enables each learner to become 'specialised' in one aspect of a topic of learning. Learners collaborate in pairs to read a text discussing key points. Learners can be guided regarding specific information to look for and discuss. For this activity learners should use the texts below to gather key facts on the long term impact of climate changes (negative or positive impact).



Learners can feedback to their partner using the '4 C's' thinking routine:

- In response to a text, learners consider:
  - Connections: What connections can you make between the text and your own life?
  - Challenge: What ideas do you disagree with or wish to challenge?
  - Concepts: What key ideas in the text do you think are important and worth holding on to?
  - Changes: Does the text suggest any changes in attitudes, thinking or actions for you or others? Explain them.





### SDG 13: Climate Action

Take urgent action to combat climate change and its impacts





# Plenary



Rate the following statements on the plenary wheel (next slide) using a scale of 1-5 (1 being few times – 5 almost all of the time) shade in the parts of the wheel.



1. Transport — Do you get about in the most eco friendly way e.g., walk, cycle, public transport?



2. Home energy — Do you switch off lights when you leave a room? Do you wear extra clothes when it's cold in the house? Do you unplug appliances you are not using e.g., chargers?



3. Water – Do you refill/reuse your water bottle? Do you turn off the tap when you are brushing your teeth?



4. Clothes – Do you buy new clothes when you don't need to? Do you take your own bag when shopping?



5. Recycling – Do you recycle as frequently as you could?



6. Food – When buying food do you check where it has came from?

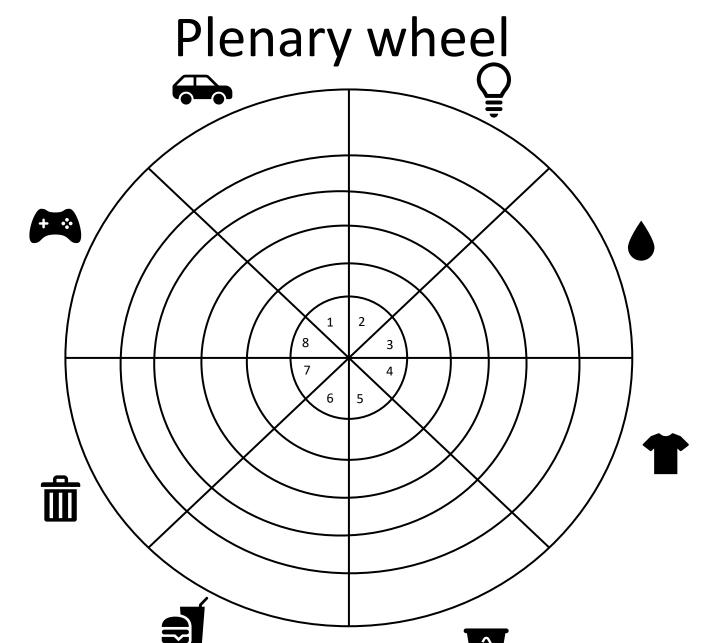


7. Litter – Do you always put your litter in the bin?



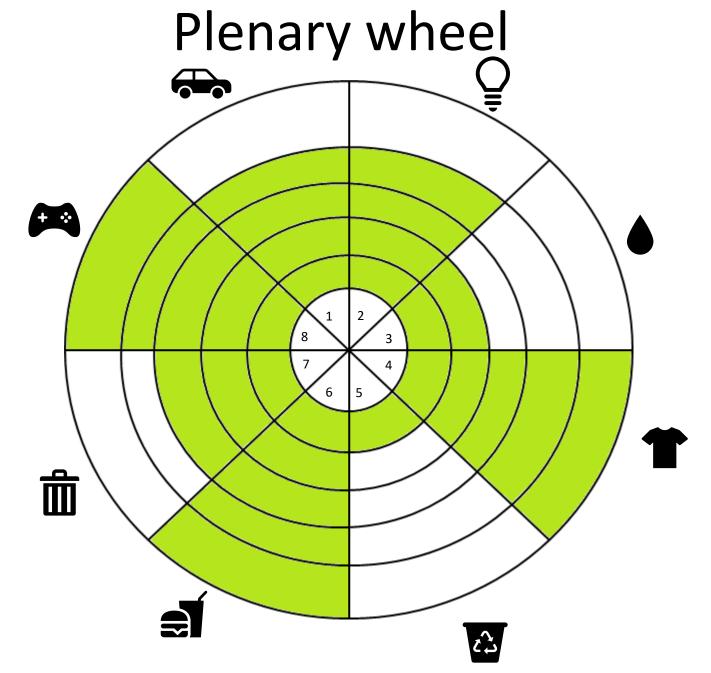
8. Take control � – Do you encourage others to make better decisions to tackle climate change?















# Glossary of Key Vocabulary



Climate Change	A significant change of climate patterns over a long period of time.
Global Warming	Process that causes the Earth's temperature to rise and makes the Earth warmer.
Fossil Fuels	Non-renewable and cannot be made by humans. They come in the form of natural gas, coal or oil.
Renewable Energy	Made from resources that nature will replace, like sunshine, wind and water.
Carbon Dioxide	Greenhouse gas produced when fossil fuels are burned by human activity. Forests, plants and the oceans absorb huge amounts of CO <sup>2</sup> , reducing the levels of CO <sup>2</sup> .
Methane	Comes from cows, sheep and paddy fields as well as from landfills or the breakdown of organic materials.
Carbon Footprint	The total amount of CO <sup>2</sup> and methane gas released into the air from human activity that consumes energy such as heat, electricity and transport.
Emissions	The production and discharge of something, especially gas or radiation.



# Glossary of Key Vocabulary



Greenhouse Effect	Warming of Earth's surface and the air above it. It is caused by gases (CO2 and methane) in the air that trap energy from the Sun.
Biodiversity	The variety of living things on Earth from humans, animals, plants and fungi down to the tiniest organism.
Action	Process by which something produces a change.
Consequence	The result of something that a person does.
Carbon Offset	An activity that balances out an individual's carbon footprint.
Reduce	Use less.
Reuse	Using again, possibly in a different way.
Recycle	Use raw materials to make something new.



#### **Definition of Texts**



Within the Literacy for All framework, regular reference to 'texts' is made. It is essential that practitioners provide learners with opportunities to explore and create a wide range of texts in order to build on the principles of 21<sup>st</sup> century relevance and personalisation and choice. Please refer to the CfE definition of texts:

#### What is meant by 'texts'?

The definition of 'texts' needs to be broad and future proof: therefore within Curriculum for Excellence,

a text is the medium through which ideas, experiences, opinions and information can be communicated.

Reading and responding to literature and other texts play a central role in the development of learners' knowledge and understanding. Texts not only include those presented in traditional written or print form, but also orally, electronically or on film. Texts can be in continuous form, including traditional formal prose, or non-continuous, for example charts and graphs. The literacy and English framework reflects the increased use of multimodal texts, digital communication, social networking and the other forms of electronic communication encountered by children and young people in their daily lives. It recognises that the skills which children and young people need to learn to read these texts differ from the skills they need for reading continuous prose. Examples are given below.

#### Examples of texts

novels, short stories, plays, poems
reference texts
the spoken word
charts, maps, graphs and timetables
advertisements, promotional leaflets
comics, newspapers and magazines
CVs, letters and emails
films, games and TV programmes
labels, signs and posters
recipes, manuals and instructions
reports and reviews
text messages, blogs and social networking sites
web pages, catalogues and directories

In planning for learning in any curriculum area it is important for practitioners to ensure that children and young people encounter a wide range of different types of text in different media. As they progress in their learning, children and young people will encounter texts of increasing complexity in terms of length, structure, vocabulary, ideas and concepts.





# Key References and Resources

- Vision 2030+ In March 2013 Scottish Ministers accepted all thirty-one strategic recommendations of the Learning for Sustainability (LfS) report. https://education.gov.scot/nih/Documents/res1-vision-2030.pdf
- World's Largest Lesson introduces the Sustainable Development Goals to children and young people everywhere and unites them in action. <a href="http://worldslargestlesson.globalgoals.org/">http://worldslargestlesson.globalgoals.org/</a>
- Education Scotland overview of climate change in education and the curriculum. <a href="https://education.gov.scot/improvement/Documents/ClimateChangeinScottishEducationBriefing140819new.pdf">https://educationBriefing140819new.pdf</a>
- Practitioner resource offering background reading to support understanding and planning for Climate Change <a href="https://education.gov.scot/improvement/learning-resources/exploring-climate-change">https://education.gov.scot/improvement/learning-resources/exploring-climate-change</a>
- Good Life Goals
   https://docs.wbcsd.org/2018/09/Good Life Goals/Pack of Actions.pdf





# **Motivational Videos**

- All Aboard for Global Goals; Thomas and Friends https://www.youtube.com/watch?v=WE8Er1KRtJU&list=PLVKXDhi02s8rNq ddxPqFjcE8fUDUMiqLl
- We the People <a href="https://www.youtube.com/watch?v=RpqVmvMCmp0">https://www.youtube.com/watch?v=RpqVmvMCmp0</a>
- Hear our Voices <a href="https://www.youtube.com/watch?v=0d1dFY13GZU">https://www.youtube.com/watch?v=0d1dFY13GZU</a>
- Decade of Action <a href="https://www.youtube.com/watch?v=9qmfgHBVplQ">https://www.youtube.com/watch?v=9qmfgHBVplQ</a>
   Global Day of Action September 25<sup>th</sup> 2020
- The girl who silenced the world for 5 minutes; Severn Cullis-Suzuki https://www.youtube.com/watch?v=xXiWi8LnZ7I
- The Good Life Goals <a href="https://www.youtube.com/watch?v=bbrYODvkvGk">https://www.youtube.com/watch?v=bbrYODvkvGk</a>
- Start Living the Good Life Goals -https://www.youtube.com/watch?v=Wg5lGuWeiWA

# Framework for Teaching and Learning COP 26





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