

Science Challenge



In the Garden

Garden Birds

If you can, have a look at this page from BBC bitesize - What are birds?

<https://www.bbc.co.uk/bitesize/topics/z6882hv/articles/zyd6hyc>

Sit quietly for 5 minutes watching and listening for any birds. If you have a garden sit quietly outside or you can sit near a window and watch. Count how many birds visit the garden. Can you recognize any?

This RSPB site will help you to identify birds you see.

<https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/identify-a-bird/>

or a sheet to download to record your findings-

<https://www.rspb.org.uk/globalassets/downloads/kids--schools/teaching-resources/bsbw-under-5-counting-sheet>

If you can, watch this episode of Let's go Live. Maddie and Greg make a bird feeder and watch the birds in their garden.

<https://www.youtube.com/watch?v=b7bi3xOZpaM&list=PLmTANLv-GyXWvII2La-sXEePmN2PC9H3g&index=2&t=0s>

Fruit and Veg

Find some fruit and vegetables or look for pictures in a magazine-

Sort the fruit and veg by colour, size, shape etc

Which part of the plant do you eat? Has it got a seed or lots of seeds?

Has it got a skin that you peel away? Do you usually cook it to eat it?

Talk about which part of the plant you eat,

is it the seed, leaf, stem, flower, root etc

Technology Challenge



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Mini Den Building

Den making is a great activity for kids – not only is it fantastically good fun, but it also helps develop so many skills.

It is an open-ended engineering, technology and design problem – the kids must decide the kind of structure to build, how to construct it, what materials to use... It's a problem with no right or wrong answers as the end result can be anything they want.

While nothing beats the all-round amazingness of making a den for yourself, making a mini den can be less daunting. Yet it is still introducing the skills and problem solving needed to make a structure of any size.

The Challenge - Sometimes we have a small toy with us who needs a holiday home in the woods or our garden. Can you use your imagination to create a den for your toy using sticks, leaves and other resources you find in your garden or the woods?

Parents – For ideas and further information, click on the link below.

[How to build your Mini Den](#)



Engineering Challenge



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Racing track

Sending cars down ramps is great fun! The faster, the better – this is also a great way to introduce and explore science and maths concepts such as angles and friction with simple materials.

1. Test it out:

Set up a ramp (use a piece of cardboard or plank of wood) and release your toy car down it.

- How far does it travel?
- How could you record how far it has went? (draw a line / count steps)

Change the height of the ramp and release the car again. Did it go further? Why?

Continue to experiment with the height until you get the best distance.

2. Engineering challenge: Construct a race track for the toy car.

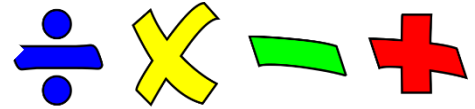
Include the ramp you were experimenting with in the first activity (the starting line.) Then using different materials to construct a track for your car to travel round. Can it make it all the way to the end of your track without stopping? Can you improve it by using what you learnt in the first task?

You might;

- Build walls to make sure your car stays on course
- Add special features like a tunnel or bumpy steps
- Build an area for a crowd to watch
- Include a pit stop area for refuelling or changing tyres
- Test out different materials on the ground for the car to travel over – do some of them slow



Maths & Numeracy Challenge



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Measurement – Capacity Container Hunt

Capacity is the amount of liquid a container can hold.

In our houses we have lots of containers which would hold liquid – storage tubs, jugs, cups and glasses in the kitchen cupboards, buckets, bottles, pet water bowls..... the list goes on.

Go on a Capacity Container Hunt –

- Can you find 8 different containers?
- Show an adult* and make sure you are allowed to investigate with them.
 - **The containers should be empty or able to be emptied of its contents without any problem/wastage/danger*
- Discuss the different containers
 - Which one do you think holds the most? Why?
 - Which one do you think holds the least? Why?
 - Can you order them from smallest capacity to largest capacity?
 - Do you think any of them will hold the same?
- Go outside or into the bathroom (over the bath/shower tray) and investigate the capacity of the containers – can you pour water from one into the other? Does all the water fit? Were your predictions about which ones had the largest/smallest capacities correct?



Literacy Challenge



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Improving Your Memory!

Kim's game

Select 10 items to put on a tray. These could include things like a fork, a soft toy, a lego brick, a pencil, an apple and a comb.

Spend a few minutes looking at the tray of objects then cover it with a cloth or move it away and see how many you can remember.

Missing Item

Say the names of four items. then repeat 3 of them and the challenge is to remember the one which was missed out.

Cat, dog, pony, cow- cat, pony, cow, _____

Run, jump, hop. skip – jump. hop, skip, _____

Apple, orange, pear, grape - orange, apple, pear, _____

Shopping Game

The first person thinks of an item they could buy at the shop and says

“I went shopping and I bought 1 potato”

Next person says-

“I went shopping and I bought 1 potato and 2 carrots”

Next person says- “I went shopping and I bought 1 potato, 2 carrots and 3 bananas”

Keep going until you can't remember the list anymore!

Retell a story

Share a story book and talk about what happens. Try to retell the story remembering what happened in the correct order. Use the pictures in the book to help.



Health & Wellbeing Challenge

Obstacle Course

Obstacle courses are a great way to encourage your child to be active, have fun and develop gross motor skills like crawling, climbing, balancing, jumping, throwing and catching.

Challenge: Set up an obstacle course using household objects for your child to complete and then encourage them to be creative and make up their own!

A few ideas for obstacles;

1. **Stepping stones** to test your child's balance. You could use large books (telephone directory), bathroom steps, toy boxes, cushions
2. **Tunnel** to encourage children to crawl correctly. You can use a toy tunnel or create one by draping blankets over the back of chairs!
3. **Rope balancing** to develop balance and coordination. Lay a skipping rope (or any kind of rope) along the ground. You could have them walk along it, jump over it from side to side. There are lots of possibilities!
4. **Sensory tub.** Fill an old washing basin, box or tray with water, sand, rice, small balls (or if you don't mind getting messy...shaving foam or mud!)
5. A **slalom** is a great way to help your child stop and turn while running. Use objects like cones, plant pots or tubs for your child to weave in and out of.
6. **Hoop and tub** to develop throwing and coordination skills. Have a hoop (or spot) to stand on and a bucket or tub which your child needs to throw a ball or beanbag into.



Language to develop whilst playing: over, under, through, jump, help, stop, go, wait, next...

Social Studies Challenge



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Blindfold Directions Game

Can you give some directions to a blindfolded partner to guide them from one place to another?

Find a good location with some obstacles, but nothing dangerous. This might be in your living room or kitchen or if the weather is good, try the task in your garden.

Set out some obstacles and a start and end point. Now try to direct your blindfolded partner around the obstacles safely, giving them clear directions and instructions.

Think about what instructions you can give your partner. You might decide to say things such as:

1. Turn left or right
2. Walk forward 5 steps
3. Turn around
4. Stop
5. Take small steps
6. Take big steps

Always be aware of your surroundings to help your partner. Good luck and have fun!

Expressive Arts Challenge



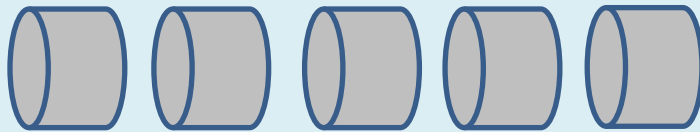
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Beautiful Blooms

Spring is a Season on the Year. Lots of flowers begin to bloom. Having a vase of flowers in your house can brighten up a room and make people smile.

Using some toilet roll tubes or kitchen roll tubes – let's make some flowers.

1. You will need two rolls per flower.
2. Take a toilet roll tube and cut into 5 pieces. A kitchen roll will make 10 pieces.



3. These will be the petals – colour them in/paint them/make them bright and cheerful.
4. To make the stalk
 - a. Squeeze the top of the second toilet roll tube together and put a small bit of Sellotape over the top. (Optional – colour this tube green)
 - b. Make two cuts in the side to make the leaves – the Leaves should now stick out (or gently persuade them to)
5. Now that your Petals are dry Pinch one end to make a Teardrop shape. Repeat for all 5 petals and join them all together at the points with glue.



6. Very carefully push the pinched end of the stalk up between two petals – It should look *something* like this!!

