

Kirkcaldy High School



N3/4 Science



Human Health Threats to Health

Name: _____

Class: _____

Teacher: _____

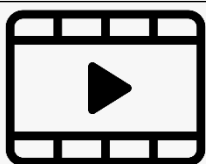
Expectations and Outcomes Learner Evaluation

Topic: Threats to Health

	LI	Learning about Viruses	Date	😊 ? ☹️
L1	SC	I can give examples of viruses		
		I can describe how viruses can spread		
		I can describe how to minimise the spread of viruses		
		I can plan and carry out an experiment to investigate the effect of handwashing		
L2	LI	Learning about Diet		
	SC	I can give examples of a balanced diet		
		I can name some of the food groups and what the body uses them for		
		I can describe some symptoms of nutrient/mineral deficiencies		
		I can plan and carry out an experiment to work out the energy content of food		
		I can research eating disorders and their effect on health		
L3	LI	Learning about Factors that affect Health		
	SC	I can give examples of how excessive alcohol consumption can affect health		
		I can give examples of how smoking can affect health		
		I can give examples of how harmful drugs can affect social, mental and physical health		
		I can give examples of poverty can affect social, mental and physical health		
		I can give examples of conditions that are related to poor personal hygiene		

L4	LI	Learning about Health Claims		
	SC	I can provide evidence for why I agree or disagree with a health claim made in the media (low fat foods, exercise and appetite, e-cigarettes, hygiene, vaccines, sugar in diet, energy drinks, red wine)		
		I can plan and carry out an investigation into a health claim made in the media and using evidence, decide whether the claim is valid		
L5	LI	Learning about Superfoods		
		I can give an example of a superfood and its health claims		
	SC	I can name the substances in superfoods which make them 'super'		
L6	LI	Learning about Energy Drinks		
	SC	I can state the main ingredients in energy drinks that claim to boost energy, alertness and concentration		
	SC	I can give two examples of health hazards linked to drinking too many energy drinks		

This is a task-based booklet. Look out for the following symbols at the top of the page. This will help you to identify what type of task you are being asked to complete!



Video



Experiment



Reading



Creative

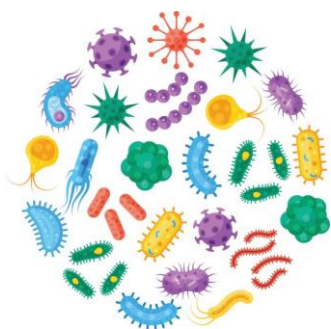


Research



Questions

Micro organisms



In this part of the unit, we will recap what we have learnt in S1 and S2 about microorganisms. We will also learn more about viruses, how they can affect our health and how we can protect ourselves against them.

Activity 1 – Microorganisms and Hygiene



Watch the video and answer the questions below:

1. Give three examples of micro-organisms

2. What do micro-organisms cause if they enter your body?

3. How can you remove them from your skin?

4. How can viruses travel from person to person?

5. Give an example of a virus that can live on surfaces for days.

6. Give an example of bacteria which lives in food and can cause illness.

Activity 2 – Examples of Microorganisms



Read the cards and use the information cards to complete the table

Micro-organism	Illness	Description

Activity 3 – Spread of Viruses



Your task is to find out how the following viruses are spread, and how we can prevent them from spreading.

Name of virus:	HIV
How is the virus spread?	
How can spread of the virus be prevented?	

Name of virus: **Influenza**

How is the virus spread?

How can spread of the virus be prevented?

Name of virus: HPV

How is the virus spread?

How can spread of the virus be prevented?

Activity 4 – Effectiveness of Handwashing

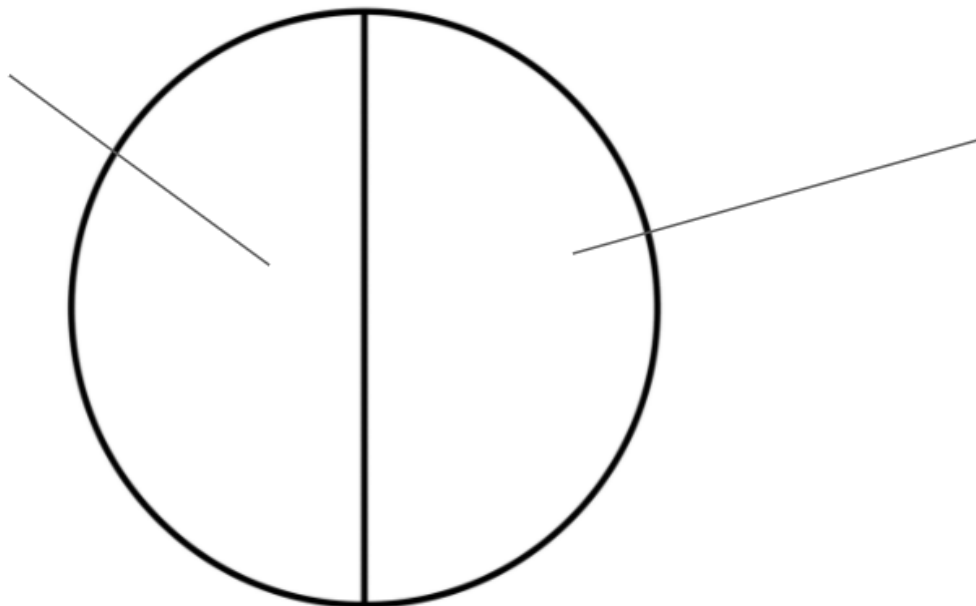


Aim: To investigate the effect of handwashing on the growth of microorganisms

Hypothesis: I think that...

Results:

Label your agar plate and draw the results in when completed.



Conclusion:

Evaluation:

What variables should we keep the same to ensure the investigation is valid?

What could we do to make the investigation more reliable?



Activity 5 – Patient Information Leaflet

Choose one of the following viruses: HIV, HPV, Influenza.

Your task is to design a patient information leaflet to be displayed in a doctor's surgery.

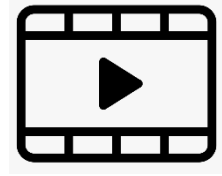


You should research the following information and include it in your leaflet:

1. Information about your chosen virus (full name, how many people are infected each year etc)
2. How is it spread?
3. How can you reduce your risk of being infected?



Task 6 - Germs and Hygiene Questions



Watch the video and answer the questions

1. What is a pathogen?

2. Describe an easy way to remove pathogens from the skin.

3. Suggest two ways to prevent the spread of the flu virus:

1.

2.

4. Give two foods which can contain the dangerous bacteria *Salmonella*:

1. _____

2. _____

5. Suggest two ways of preventing infection from food.

1.

2.

6. Name two diseases caused by dirty water:

1. _____

2. _____

Microorganisms Summary/Extension Tasks

1. Make brief notes in your jotter to summarise the knowledge about microorganisms.

Use the learning intentions and success criteria to help

2. Make a summary mind-map of key points. Again, use the LI and SC to help.

Factors Affecting Health - Diet

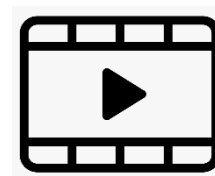
Eating a healthy, balanced diet is an important part of maintaining good health.

This involves eating a wide variety of foods in the right proportions and consuming the right amount of food and drink to achieve and maintain a healthy body weight.



Activity 1 – Food Groups

1. Watch the video to find out what each food group is needed for and give examples of foods that would be part of this food group.
2. Use the internet to fill in any gaps.



Food group	Used for	Examples of foods
Protein		
Carbohydrate		
Fat		

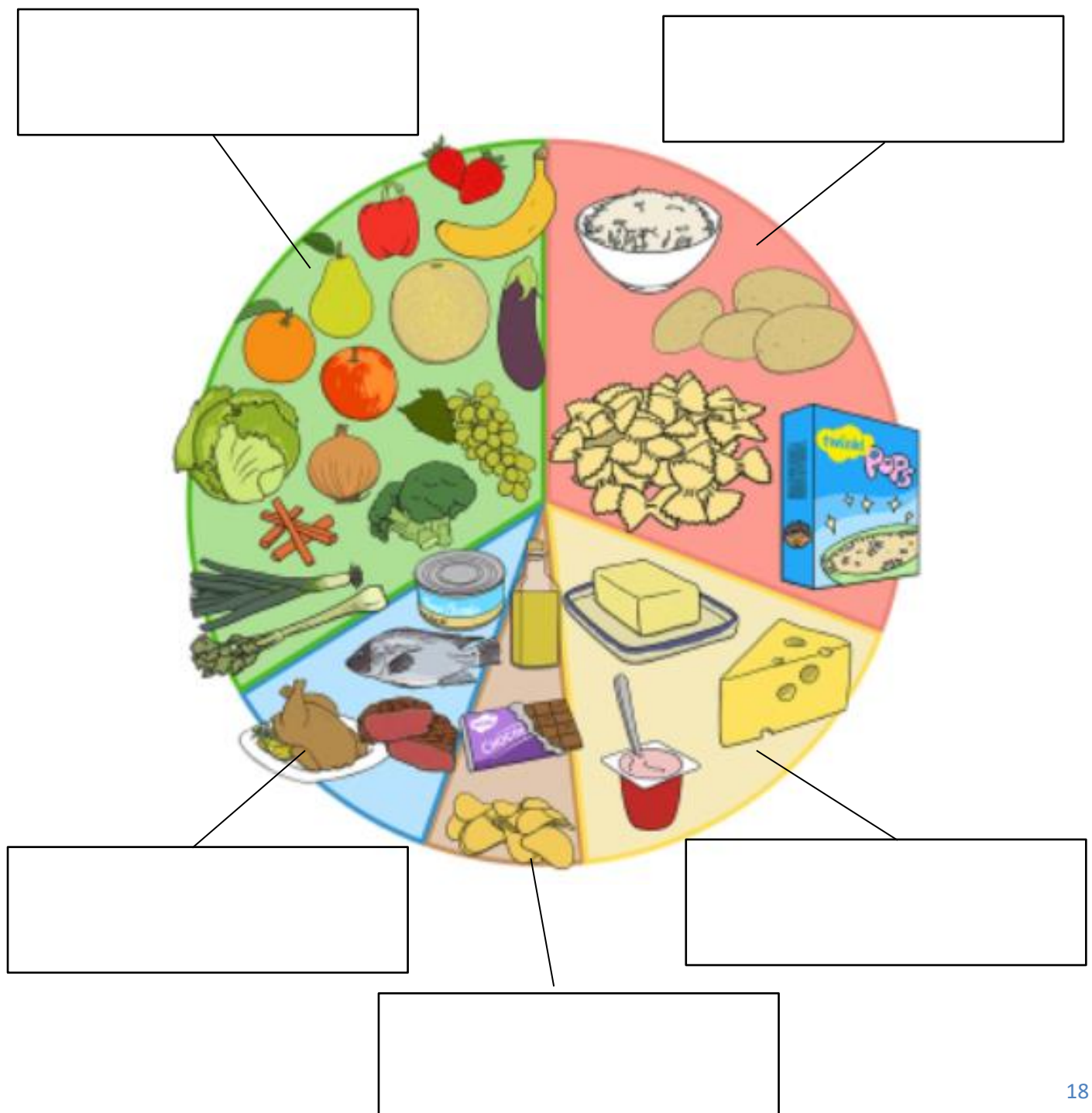
Do the same for the following vitamins and minerals

Food group	Used for	Examples of foods
Vitamin C		
Vitamin A		
Calcium		
Iron		
Fibre		

Activity 2 – Eat well plate

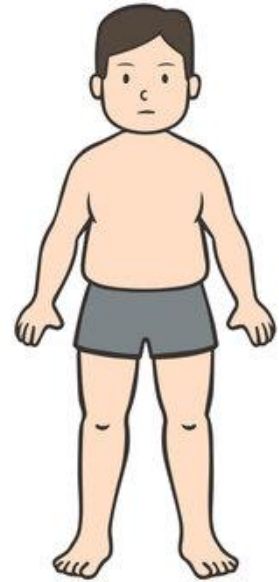
The **NHS eatwell plate** shows these food groups and the proportions in which they should be eaten.

1. Label the following eat well plate with the different food groups
2. Collect a blank eat well plate. Cut out items from the food magazines to design your own eat well plate.

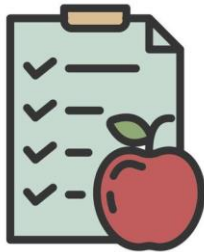


Activity 3 – Meal Plan

Ben, a 30-year-old male, recently visited his GP and learnt that his BMI is 28.0. This means that he is overweight for his height and weight. Ben would like to make changes to his diet to help him achieve a healthy weight.



Your task is to design a **weekly meal plan** for Ben.
Remember: a balanced diet includes a variety of food groups!



MEAL PLAN

You should include:

- Breakfast
- Lunch
- Dinner
- A snack
- Drinks

Day	Breakfast	Lunch	Dinner	Snack	Drinks
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					

Activity 4 – Food Tests Experiment



Testing for Fat

Aim: To find out which foods contain fat

Method:

[illegible]

Results:

Food	Observation	Does it contain fat?

Conclusion: *(remember your aim)*

What have I found out from my experiment?

Evaluation:

What could I have done to improve my experiment

Testing for Protein



Aim: To find out which foods contain protein

Method:

Results:

Food	Observation	Does it contain protein?

Conclusion: *(remember your aim)*

What have I found out from my experiment?

Evaluation:

What could I have done to improve my experiment?

Testing for Carbohydrates



Aim: To find out which foods contain carbohydrates

Method:

Results/conclusion:

Iodine is used to test for _____. If starch is present, iodine changes from _____ to _____ - _____.

Benedict's solution is used to test for _____. If sugar is present, Benedict's changes from _____ to _____.

Activity 5 – Bar Graph



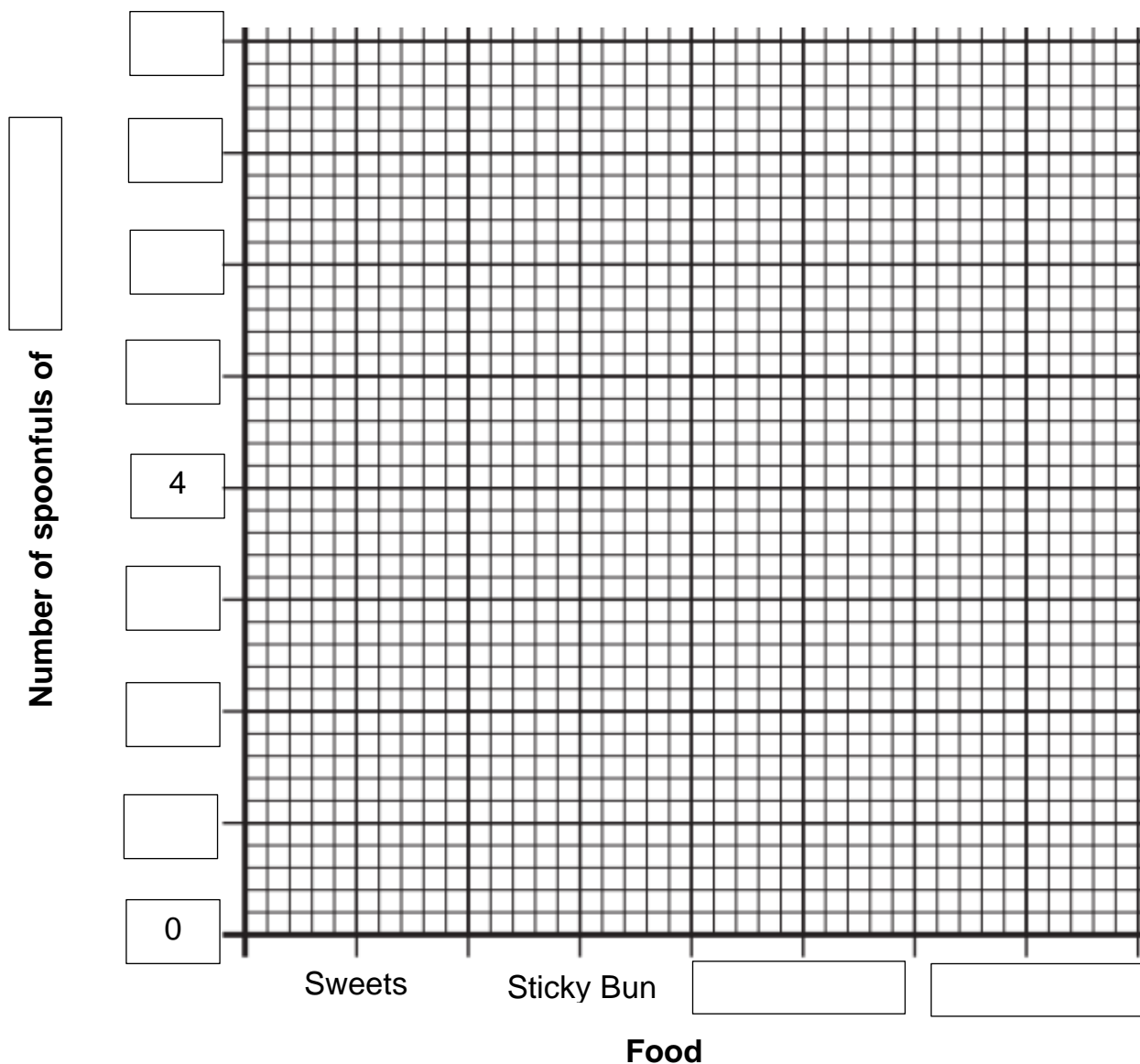
1. Most of the sugar we eat is “hidden” in sweet foods.

A tube of sweets contains about 5 spoonfuls of sugar and a sticky bun contains about 4 spoonfuls of sugar. A bag of nuts has no sugar content but a can of cola contains as much as 7 spoonfuls of sugar.

- a) Construct a table of this information.

Food	Number of spoonfuls of sugar

- b) Complete the **bar chart** below using this information.



Activity 6 - Questions



1. Read the passage carefully.

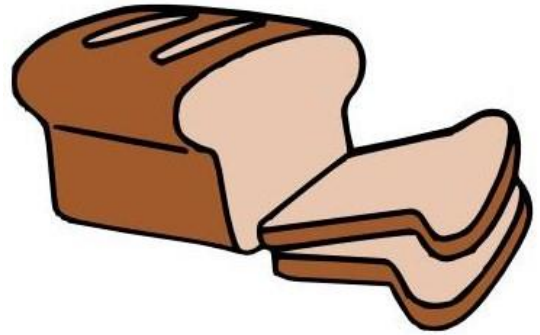
The type of food we eat is important for our health. Fibre is the part of plant food which humans cannot digest. It has been claimed that eating fibre can help to prevent some illnesses. Fibre is thought to help prevent bowel cancer by carrying away the chemicals from our gut which may cause cancer.

A lot of fibre in a meal can make us feel full. This helps to stop us overeating. This leads to fewer illnesses caused by overeating.

What is this passage **mainly** about? (Circle the correct answer)

- A The food we eat
- B Fibre in our diet
- C Causes of illness
- D Preventing cancer

2. A small loaf of bread contains 27 grams of dietary fibre. The loaf is cut up into 9 equal slices.



- a. How many grams of dietary fibre will each slice provide?

Space for Working

Answer

.....grams

- b. Morag eats three slices of the bread. This provides her with 885 kilojoules of energy.

How many kilojoules of energy does each slice of the bread provide?

Space for Working

Answer

.....kilojoules

Vitamin and Mineral Deficiencies



Activity 7 – Vitamin and Mineral Deficiencies Research

We know that maintaining a healthy balanced diet is important to ensure the body gets essential vitamins and minerals. But did you know, severe vitamin deficiencies can cause diseases.

First: use the laptops to find the answers to the following questions.

- Vitamin C deficiency can cause which disease? _____
- Vitamin D deficiency can cause which disease? _____
- Lack of iron can cause which disease? _____
- Lack of iodine can cause which disease? _____

Then: Your task is to research and present information about a vitamin/mineral deficiency.

Choose one of the following deficiencies:

- Scurvy
- Rickets
- Anaemia
- Goitre

You should present your work as a PowerPoint/Poster/Word Doc/Information leaflet.

Your presentation should include:

1. An overview of what the deficiency is
2. Symptoms
3. How it can be treated or prevented

Activity 8 – Question



Vitamins and minerals are substances which are required to keep the body healthy.

- a) Name an element found in milk and dairy products required by the body to keep bones strong.

1

- b) Highlight information about different vitamins in different colours. Use this information to answer the questions.

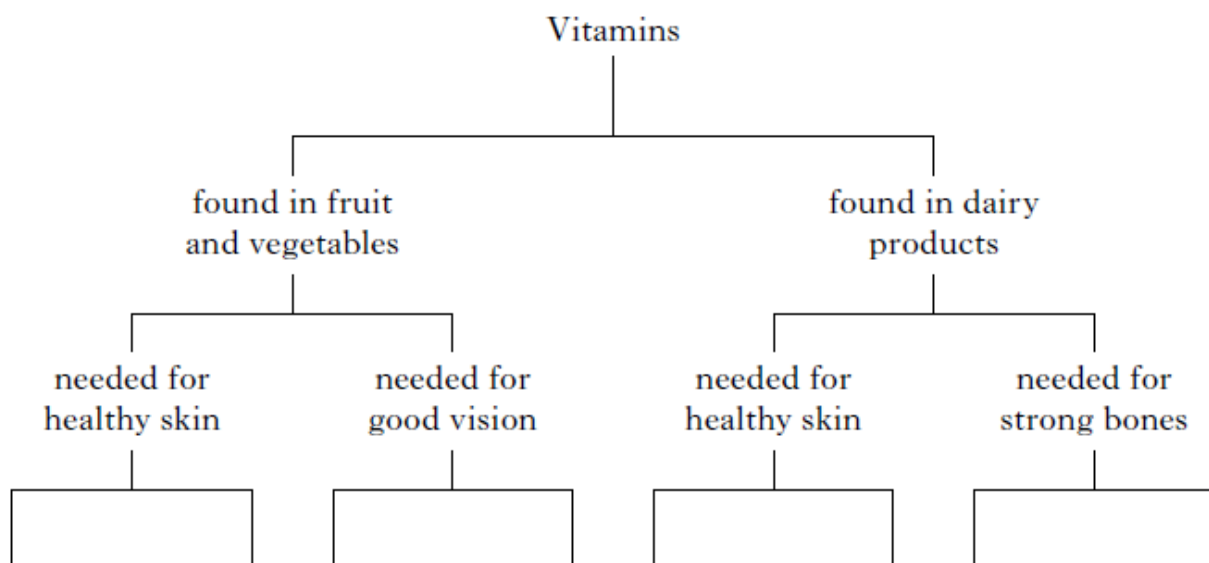
Vitamin D is needed by people to strengthen their bones. Sunlight is needed for the body to make vitamin D. Vitamin D is also found in dairy products.

Vitamin A is important for our eyes. It protects their surface and helps us to see in dim light. The best source of vitamin A is fish liver oil. The body can also get vitamin A by eating carrots – the orange substance in carrots (called carotene) is turned into vitamin A by the body.

Scurvy, a skin disease, is caused by a lack of vitamin C. Vitamin C is found in green vegetables and citrus fruits such as lemons and limes.

Vitamin B2, which is found in dairy products, is also needed for healthy skin.

- i) Use the information above to complete the following key by entering the names of the vitamins in the correct boxes.



- ii) Name **two** vitamins which the body can make itself.

2

vitamin _____

vitamin _____

Energy in Foods



Activity 9 – Burning Food Experiment

Aim:

To find out which food releases the most energy when burned.

Method:

--

Results:

Food	Temperature of water (°C)		Rise in temperature (°C)
	At start	After food has burned	
flour			
icing sugar			

Conclusion: *(remember your aim)*

What have I found out from my experiment?

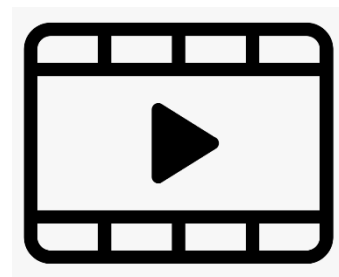
Evaluation:

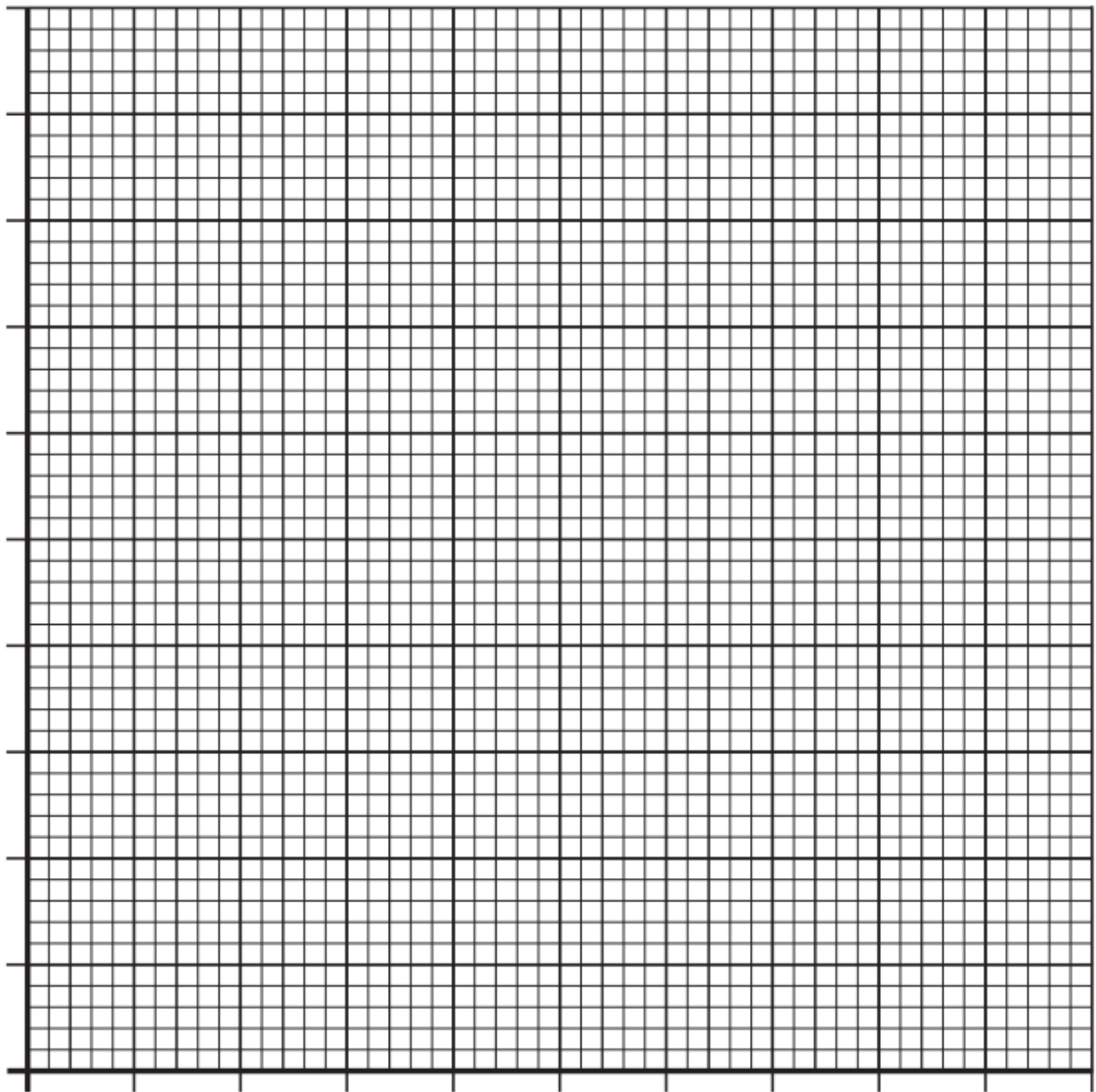
What could I have done to improve my experiment?

Extension:

- Present your results as a bar graph.
- Graph paper is on the next page.

Extra Task: Watch 'Supersize Me'



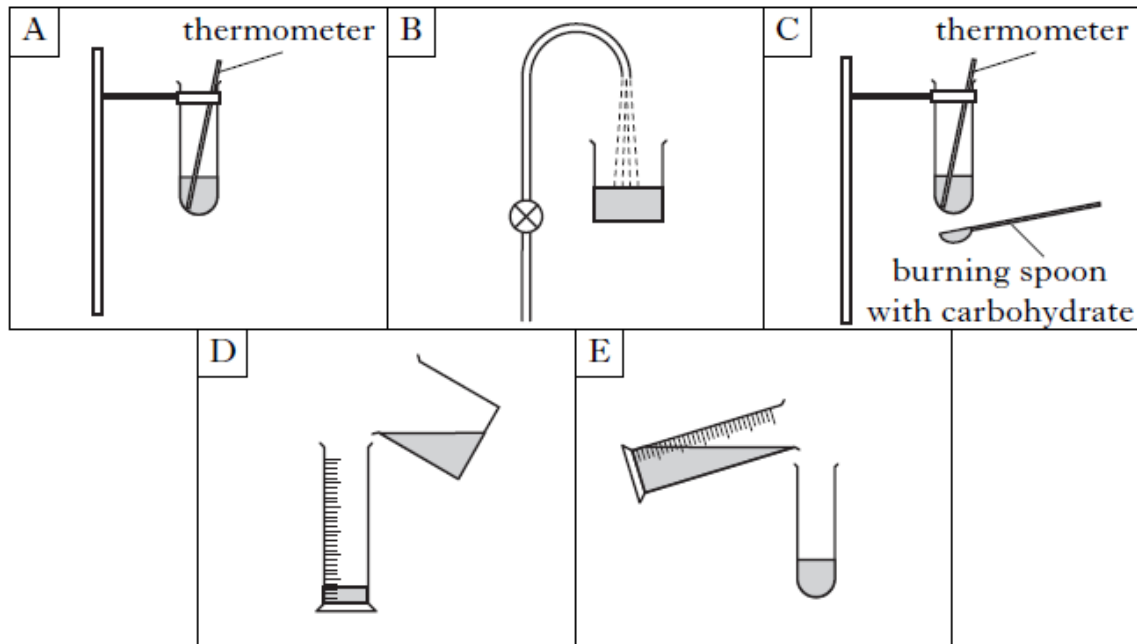


Activity 10 – Question

An experiment can be carried out to compare the heat energy given out when different foods containing carbohydrates are burned.



The diagrams show 5 steps in this experiment.



- (a) Place a letter in each box to show the correct order in which the experiment should be carried out. 1



- (b) The experiment was carried out using flour then icing sugar.

The same volume of water was used each time.

State another factor which must be kept the same to make the experiment fair.

_____ 1

Factors Affecting Health

Health can be affected by the many lifestyle choices. This part of the course focuses on the following lifestyle choices and how they impact on social, mental and physical health.

1. Poor diet
2. Alcohol
3. Smoking
4. Harmful drugs
5. Poor hygiene
6. Poverty



Factors Affecting Health - Poor Diet

Activity 1 – How does being overweight or underweight affect your health?

Research and find information/answers to the following questions.



1. Being overweight can increase the risk of having certain medical conditions. List 3 conditions that being overweight can lead to.

2. How might being overweight affect someone's ability to exercise?

3. List 3 lifestyle factors that have resulted in an increase in the number of overweight/obese adults in the UK.

4. List 3 health conditions that someone who is very underweight is at risk of developing.

Activity 2 – Jamie’s Plan to Tackle Childhood Obesity

Read the following article and answer the questions below.



Link: [Jamie's plan to tackle childhood obesity | Features | Jamie Oliver](#)

1. What percentage of primary aged children are classified as obese?

2. What illnesses and diseases are children likely to develop when older?

3. What food products possess a high amount of ‘harmful sugars’?

4. How can advertising and marketing companies encourage children to make healthier choices?

5. How can restaurants and cafes support the war on childhood obesity?

Factors Affecting Health - Alcohol



Activity 3 – Short and Long-Term Effects of Alcohol

Write the short-term effects in the box closest to the image and the long-term effects in the outer box. Use the statements below to help.

memory loss	falling out or breaking up with someone	stroke
alcohol dependency	feeling and/or being sick	acne
drowsiness	alcohol poisoning	illnesses related to high blood pressure
regret or guilt about their behaviour	obesity	dizziness
cancer	feeling sociable	accidents and injuries due to falling over
diarrhoea	dental health issues	poor judgments and decisions
a 'hangover' the following day	embarrassment from doing something they wouldn't have usually done	dehydration
liver disease (cirrhosis)	headache	fertility issues
depression	lack of inhibitions	



Activity 4 - Questions



1 large glass
(250ml) of 12% wine



A bottle of
12% wine



1 double measure
(50ml) of gin and tonic



1 double measure
(50ml) of vodka



1 pint of
5.2% lager



1 pint of
6% cider

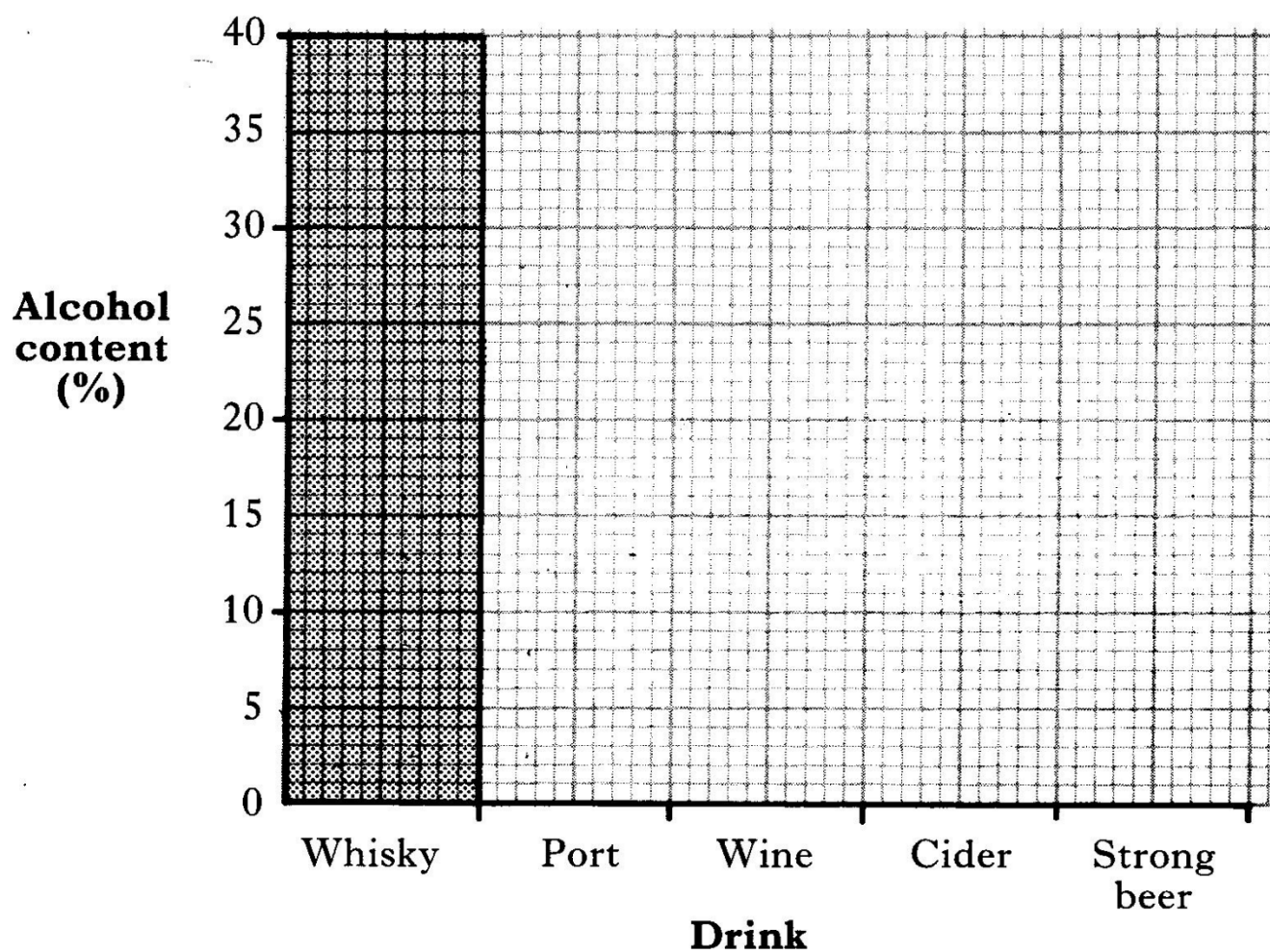
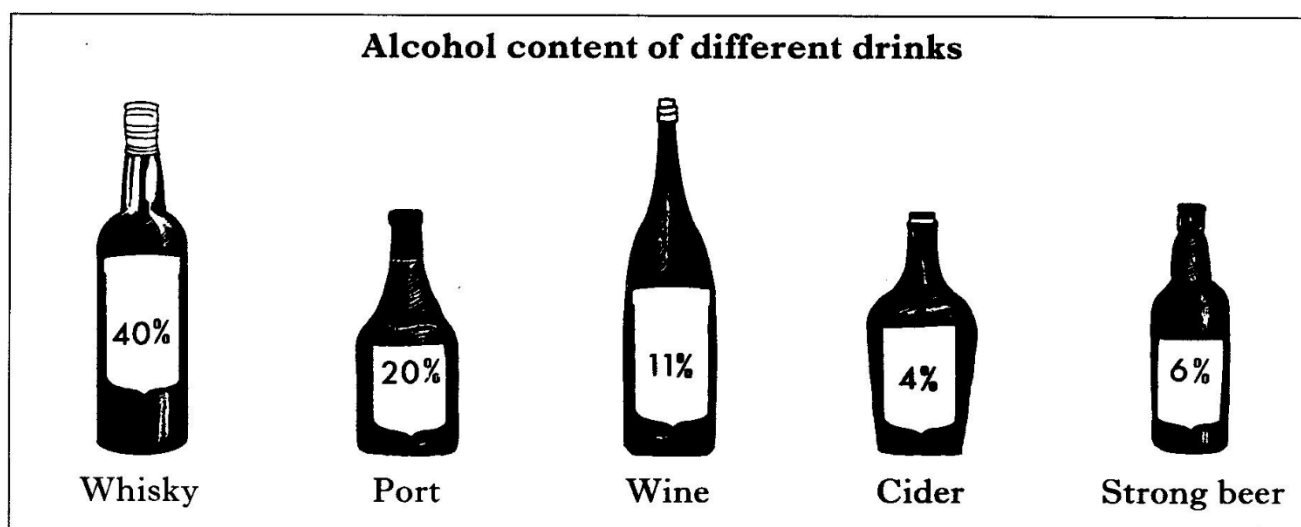


1 pint of
4% ale

1. Use the information above to complete the table.

Drink	Units of Alcohol
Large glass of wine (250 ml)	
Bottle of wine (12%)	
Single measure (25 ml) of spirit e.g. vodka, gin, whisky	
Double measure (25 ml) of spirit e.g. vodka, gin, whisky	
Pint of lager (5.2%)	
Pint of cider (6%)	
Pint of ale (4%)	

2. Complete the bar graph to show the alcohol content of the five different drinks.



3. Calculate the total units for the following drinks:

(a) 3 double vodkas and coke

(b) 3 large glasses of wine

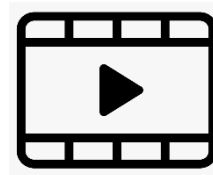
(c) 3 pints of lager and a vodka red bull

(d) 1 glass of wine and a pint of ale

(e) $\frac{1}{2}$ pint of lager and 2 pints of cider

Factors Affecting Health - Smoking

Activity 5 - What's in a Cigarette? Video Questions



1. What is the main ingredient in a cigarette?

2. Complete the table to show other sources of some the chemicals found in a burning cigarette:

Source	Chemical
Paint stripper	
	Methanol
Fertiliser	
	Ammonia
	Arsenic, Carbon monoxide, Hydrogen cyanide

3. How much tar can be deposited in the lungs each year if 20 cigarettes are smoked per day?

Over _____ kilogram

4. What does carcinogenic mean?

5. Name two non-life-threatening side effects of smoking:

_____ and _____

6. Name two potentially fatal diseases known to be caused by smoking.

_____ and _____

7. What is the chemical stimulant found in tobacco called?

8. Why is it hard to stop smoking once started?

Activity 6 – Effects of Smoking Card Sort



1. Sort the cards into physical, mental and social effects of using tobacco.
2. Then answer the questions.

<u>Social</u>	<u>Mental</u>	<u>Physical</u>

Questions:

1. Are there any risks that could fall under more than one category?
2. Are there any short-term risks that may lead to other longer-term risks?
3. Why do you think tobacco has a legally imposed age restriction?
4. Why do you think the number of young people who smoke cigarettes has decreased year on year for the last 30 years?

Activity 7 – Questions



The table shows the percentage of men of different ages and their smoking habits.

	Percentage of men (%)					
	16–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65–74 years
Low smokers	13	7	6	3	2	4
Medium smokers	19	17	11	13	15	8
Heavy smoker	6	15	18	17	17	8

(a) What percentage of men aged 35-44 years are medium smokers?

(b) What percentage of men aged 65-74 years are low smokers?

(c) What percentage of men aged 16-24 years are heavy smokers?

(d) Calculate the percentage of men who smoke for each age range.

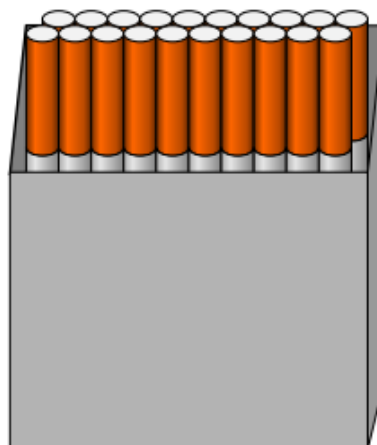
	16–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65–74 years
%						

Activity 9 – Word Search

Find the following words in the word search:



heart disease
throat cancer
lung cancer
cigarettes
addictive
dangerous
emphysema
nicotine
friends



Tobacco

breath
family
oxygen
stroke
Cancer
looks
teeth
money
Smoke
gums
odor
fire
drug
Kill
you

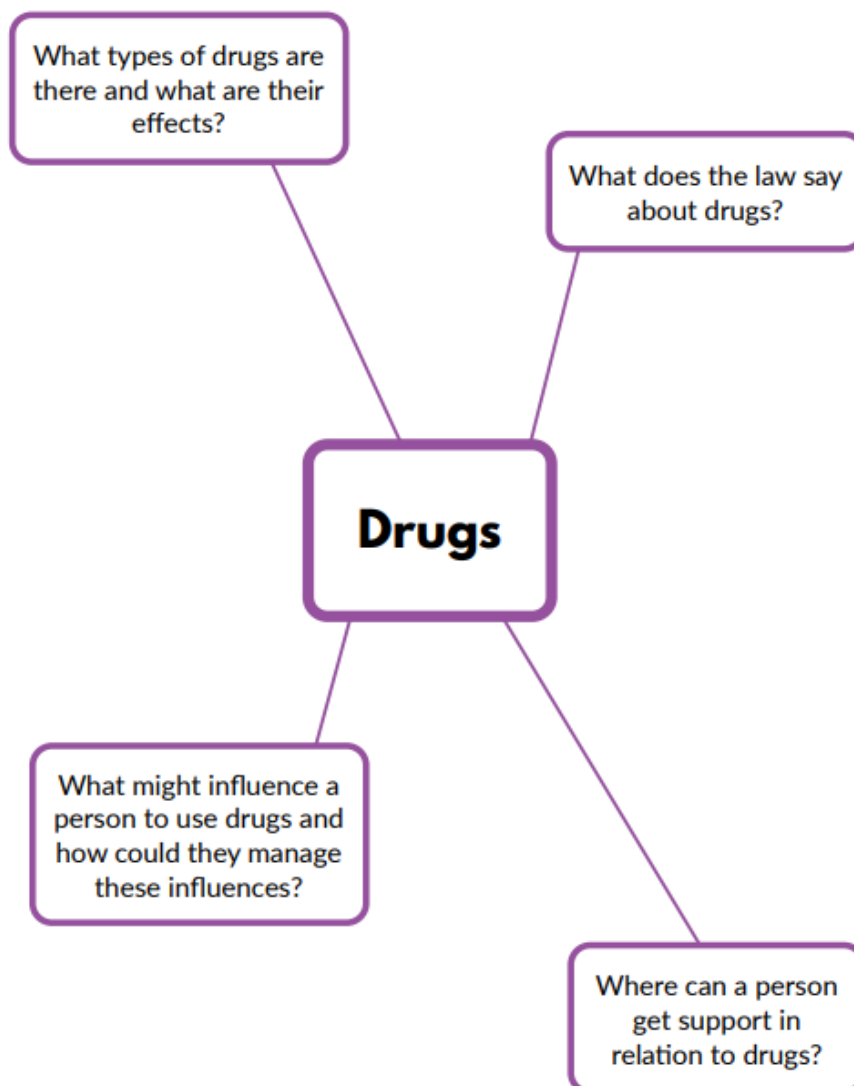
D	Q	F	W	Y	Y	V	O	C	O	X	F	Q	G	U	M	S	U	R	Q	G	U	J	A
A	Q	B	F	N	J	W	L	Y	T	X	R	S	K	H	Y	Q	Y	H	N	M	I	Z	J
R	P	O	I	H	E	N	N	U	T	U	I	G	A	F	J	G	P	Q	E	F	V	L	D
F	F	H	B	Y	T	H	R	Q	M	B	E	J	M	Z	F	U	A	L	W	G	Z	V	H
W	I	V	N	A	E	Y	E	N	O	M	N	M	W	M	E	R	D	E	Q	B	O	U	N
N	R	E	R	B	E	I	H	P	T	Z	D	K	M	G	B	D	D	T	G	E	F	G	W
O	E	M	Q	G	T	E	Y	F	P	E	S	S	C	I	I	Y	I	W	Z	Y	I	G	Z
D	W	S	L	Q	H	X	C	I	G	A	R	E	T	T	E	S	C	B	W	A	A	F	R
O	O	K	F	X	U	G	Q	M	D	E	K	O	R	T	S	N	T	E	Z	O	A	R	X
R	I	B	N	P	B	R	E	A	T	H	U	C	R	D	L	X	I	H	U	C	J	E	U
S	H	Y	L	I	M	A	F	A	W	F	N	M	K	N	U	A	V	X	I	C	I	C	H
F	E	R	U	J	X	B	U	N	T	Z	U	M	D	N	F	Q	E	V	T	A	T	N	Q
N	S	M	L	U	N	G	C	A	N	C	E	R	A	P	J	S	Z	D	I	B	Q	A	R
K	A	E	Q	E	M	P	H	Y	S	E	M	A	E	K	O	M	S	M	S	O	X	C	D
G	E	N	J	R	R	H	G	S	K	O	O	L	N	C	D	Y	X	E	N	T	K	T	J
K	S	I	O	D	J	U	E	Y	M	G	V	R	C	P	M	F	D	K	D	C	V	A	N
X	I	T	Q	H	C	M	C	S	Y	P	Q	H	M	N	Z	H	A	J	L	J	U	O	T
K	D	O	S	U	Y	O	U	C	P	H	L	O	R	M	J	E	N	T	Y	N	C	R	F
H	T	C	K	V	K	Y	T	F	B	H	Y	X	K	E	W	D	G	F	P	T	L	H	U
X	R	I	V	C	D	T	G	D	H	W	B	Y	A	Z	L	G	E	M	Y	M	Y	T	S
X	A	N	Y	L	I	G	E	Z	D	A	V	G	S	L	O	I	R	F	E	X	E	W	S
K	E	X	W	E	A	G	V	H	E	T	N	E	F	L	E	Q	O	E	Y	G	P	E	F
W	H	N	F	H	Q	Q	K	I	L	L	G	N	P	M	C	Q	U	X	Q	E	R	J	K
Z	H	M	A	X	K	R	R	S	O	B	R	E	C	N	A	C	S	X	I	F	A	H	B

Factors Affecting Health – Drugs



Activity 9 – Mind Map

Complete the mind map to brainstorm what you already know about drugs and their effects



Activity 10 – Types of Drugs and their Effects on Health

- Sort the cards into types of drugs
- Then match two 'effects' cards to each drug type



Activity 11 – Summary



Using the information above (and the internet if needed), summarise your knowledge of harmful drugs by suggesting how these drugs might affect your: physical, mental and social health.

Health	Impact of harmful drug
Social	
Mental	
Physical	

Other Factors Affecting Health



Activity 12 – Impact of Poverty on Health

1. Use the laptops to investigate the impact of poverty on health.
2. You should present your findings as a poster/power point/information sheet/other suitable format
3. You should include:
 - What is poverty?
 - 4 examples of diseases/conditions that people in poverty are at risk of developing
 - Some examples of how poverty might affect someone's mental health
 - Some examples of how poverty might affect someone's social health
 - Why are people living in poverty more likely to have poorer health?

Helpful links:

<https://www.bbc.co.uk/bitesize/guides/zdcgwtty/revision/3>

<https://www.bbc.co.uk/bitesize/guides/zt9hvcw/revision/3>

<https://cpag.org.uk/child-poverty/effects-poverty>

<https://www.rcpch.ac.uk/resources/health-inequalities-tool-1-improve-your-understanding-child-poverty-health-inequalities>

Activity 13 – Impact of Poor Hygiene on Health



Poor personal hygiene can also negatively impact someone's health.

Explain how poor personal hygiene might contribute to the development of the following conditions.

Head lice

Tooth decay

Athlete's foot

Diarrhoea

Factors Affecting Health Summary/Extension Tasks

1. Make brief notes in your jotter to summarise the knowledge about the factors that affect health. Use the learning intentions and success criteria to help
2. Make a summary mind-map of key points. Again, use the LI and SC to help.

Health Claims



This part of the course focuses on health claims

Companies that market and sell packaged food are often very good at convincing you to buy their products.

It is therefore very important that we are able to read information and make an informed-decision about whether we agree or disagree with statements.

Activity 1 – Health Claims in the Media



Lucozade

In 2014, an advert for Lucozade claimed that the drink contains substance you need *“hydrating you, fuelling you better than water”*

Is this health claim valid?

YES/NO

Why?



Red Wine



Various claims have been made in the media saying that drinking a glass of red wine a day has health benefits.

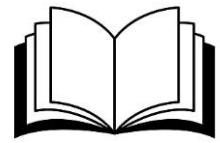
Is this health claim valid?

YES/NO

Why?

Low Fat Foods

Read the article 'The Truth about Low-Fat Food' and summarise the key points below:



Activity 2 – Analysing Health Claims

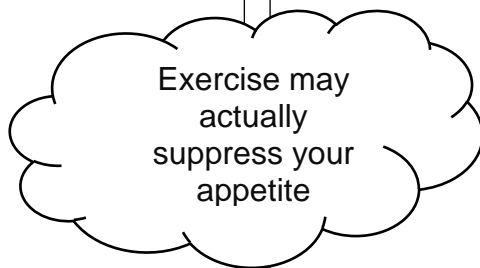


1. Read the following health claims.
2. Use your knowledge or the internet to give a balanced argument for and against the health claim, if you can.
3. This means you should try to find reasons to prove the statement true, and reasons why the statement could be false.
4. Finally, decide whether YOU agree or disagree with the health claim.

Reasons to agree:	Reasons to disagree:
<div style="text-align: center;"><p>Low fat foods are better for you</p></div>	
<div style="text-align: center;">Agree/disagree</div>	

Reasons to agree:

Reasons to disagree:



Agree/disagree

Reasons to agree:

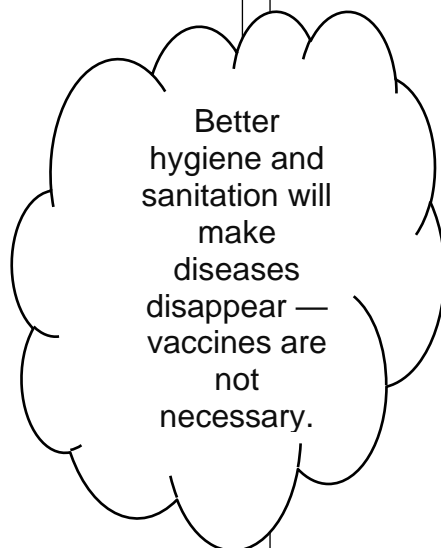
Reasons to disagree:



Agree/disagree

Reasons to agree:

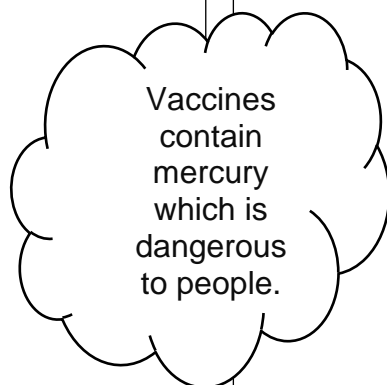
Reasons to disagree:



Agree/disagree

Reasons to agree:

Reasons to disagree:



Agree/disagree

Reasons to agree:

Reasons to disagree:

Eating large
amounts of
sugar can
cause
weight gain
and obesity

Agree/disagree

Reasons to agree:

Reasons to disagree:

Energy
drinks help
athletes to
improve their
performance

Agree/disagree

Energy Drinks

Activity 3 – What you need to know about energy drinks.

Read the information leaflet and answer the following questions



1. What are the main ingredients of energy drinks?

2. What are the benefits of caffeine?

3. How much caffeine can an adult safely have?

4. What are the side effects of caffeine?

5. Manufacturers of energy drinks claim that the drinks boost your energy, alertness and concentration. List some of the main ingredients put into these drinks that back up the claim.

6. Give some examples of health hazards linked to drinking too many energy drinks.

Activity 4 – Designing your own energy drink



Who is your energy drink aimed towards?

What flavours will you include?

What other ingredients will you include?

Are you going to include caffeine? If so, how much? Think about safe limits for your chosen target group!

What will your energy drink be called?

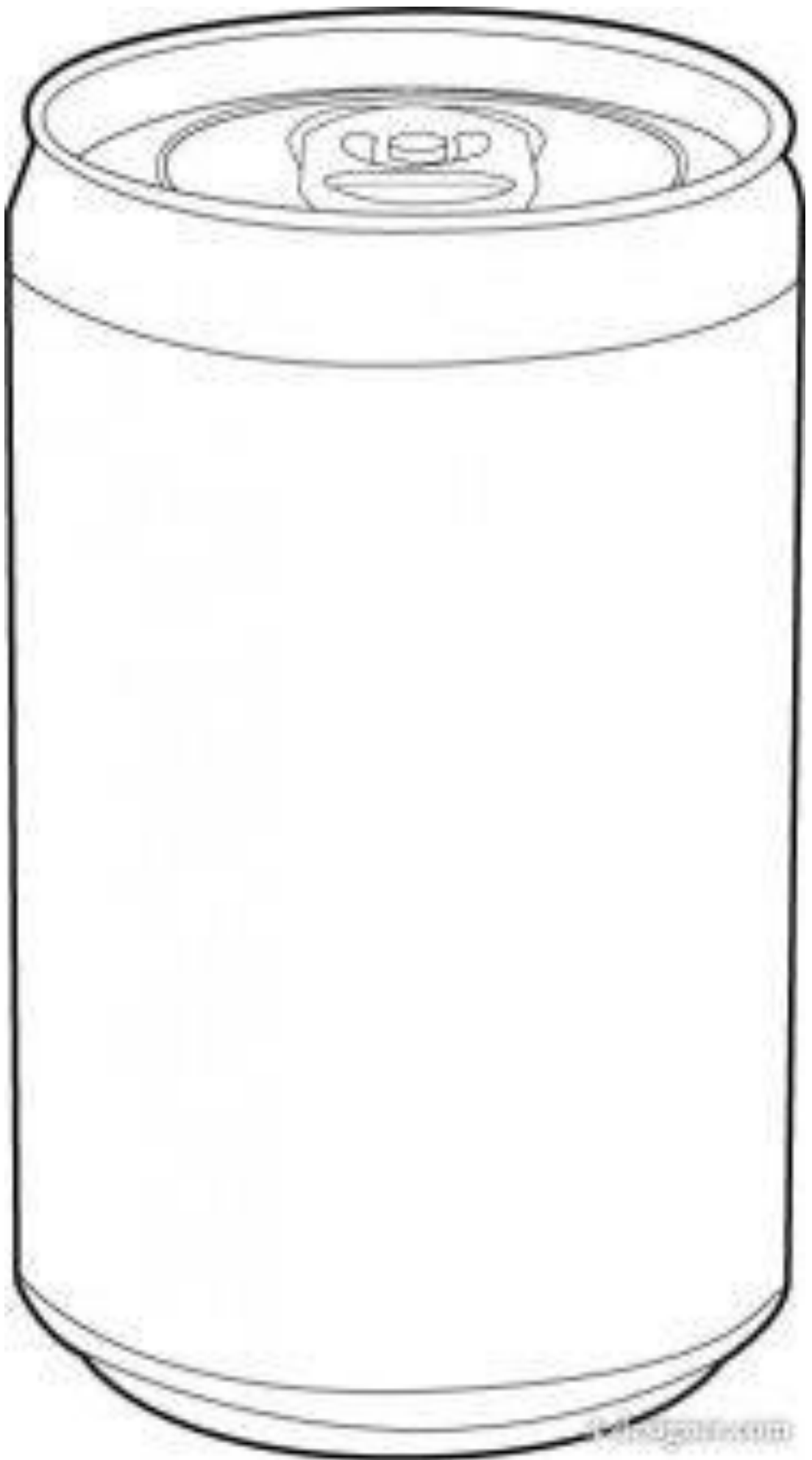
Is it a can/bottle? What volume?

How much will you sell it for?

Activity 5 –



Designing your Energy Drink Packaging



Activity 6 – Advertising your Energy Drink

Create an advert that could be used to promote your energy drink.



This could be:

- A billboard poster
- A song that could be played on the radio
- A short video/stop-motion animation that could be used as a TV commercial

Superfoods

Activity 7 – Benefits of Superfoods



Read through 'Superfood Information Sheet' and complete the table in your notes.

Superfood	Benefit to Health	Important substance

Health Claims Summary/Extension Tasks

1. Make brief notes in your jotter to summarise the knowledge about health claims. Use the learning intentions and success criteria to help
2. Make a summary mind-map of key points. Again, use the LI and SC to help

Revision Questions



1. Tick (✓) **one** box for each food group in the table to show its **main** use.

One food group has been completed for you.

<i>Food group</i>	<i>Main use</i>		
	<i>Energy</i>	<i>Growth and repair of cells/tissues</i>	<i>Protection against disease</i>
Carbohydrates	✓		
Proteins			
Fats			
Vitamins and minerals			

2. The table below shows the recommended **daily** intake of food groups necessary for a healthy diet.

<i>Food group</i>	<i>Recommended daily intake (measures)</i>
Carbohydrate	5–14
Fruit/vegetables	5–9
Dairy	2–3
Meat	2–3
Fat	0–3
Sugar	1

1 measure = 25 grams (g)

- (a) Which **two** food groups should a person have an intake of 50–75 g per day?

_____ and _____ 1

- (b) Calculate the **maximum** number of recommended fat measures **in one week** which would be considered healthy.

Space for calculation

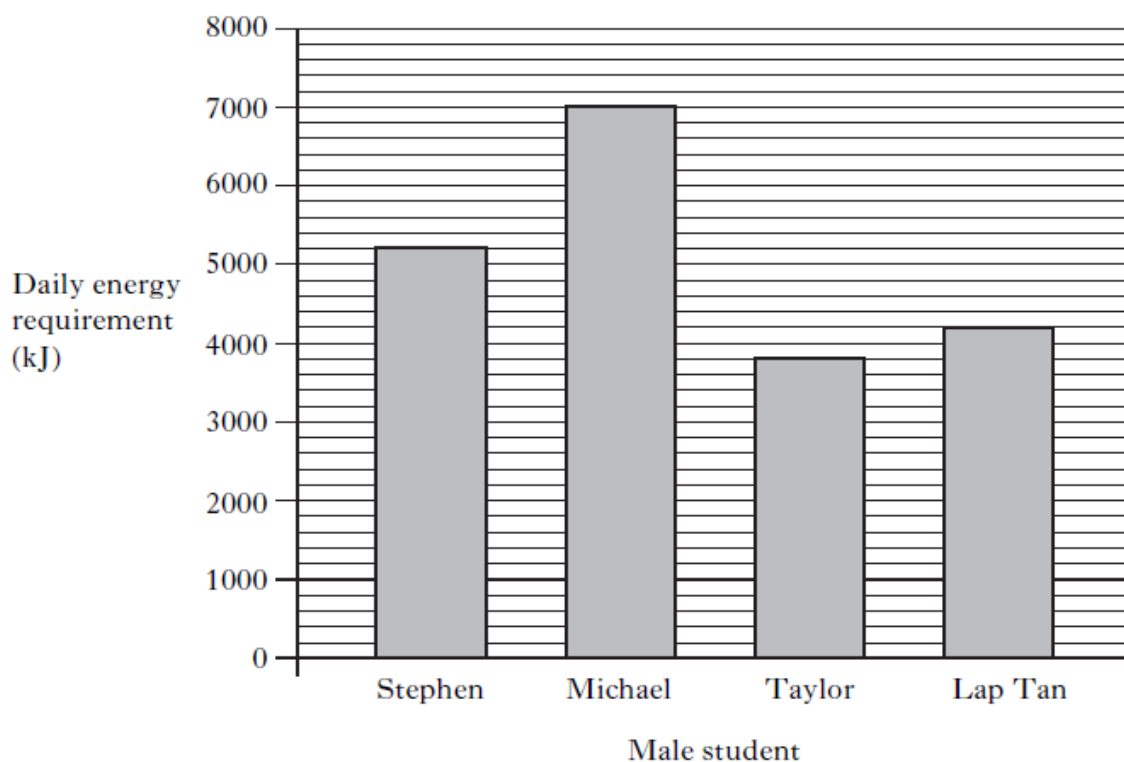
_____ measures per week 1

- (c) Calculate how many **grams** of sugar a recommended **in one week**.

Space for calculation

_____ grams per week 1

3. The bar graph below shows the daily energy requirements of four male students.



- (i) Use the information in the bar graph to complete the table below.

<i>Male student</i>	<i>Daily energy requirement (kJ)</i>
Stephen	
	7000
Taylor	
Lap Tan	

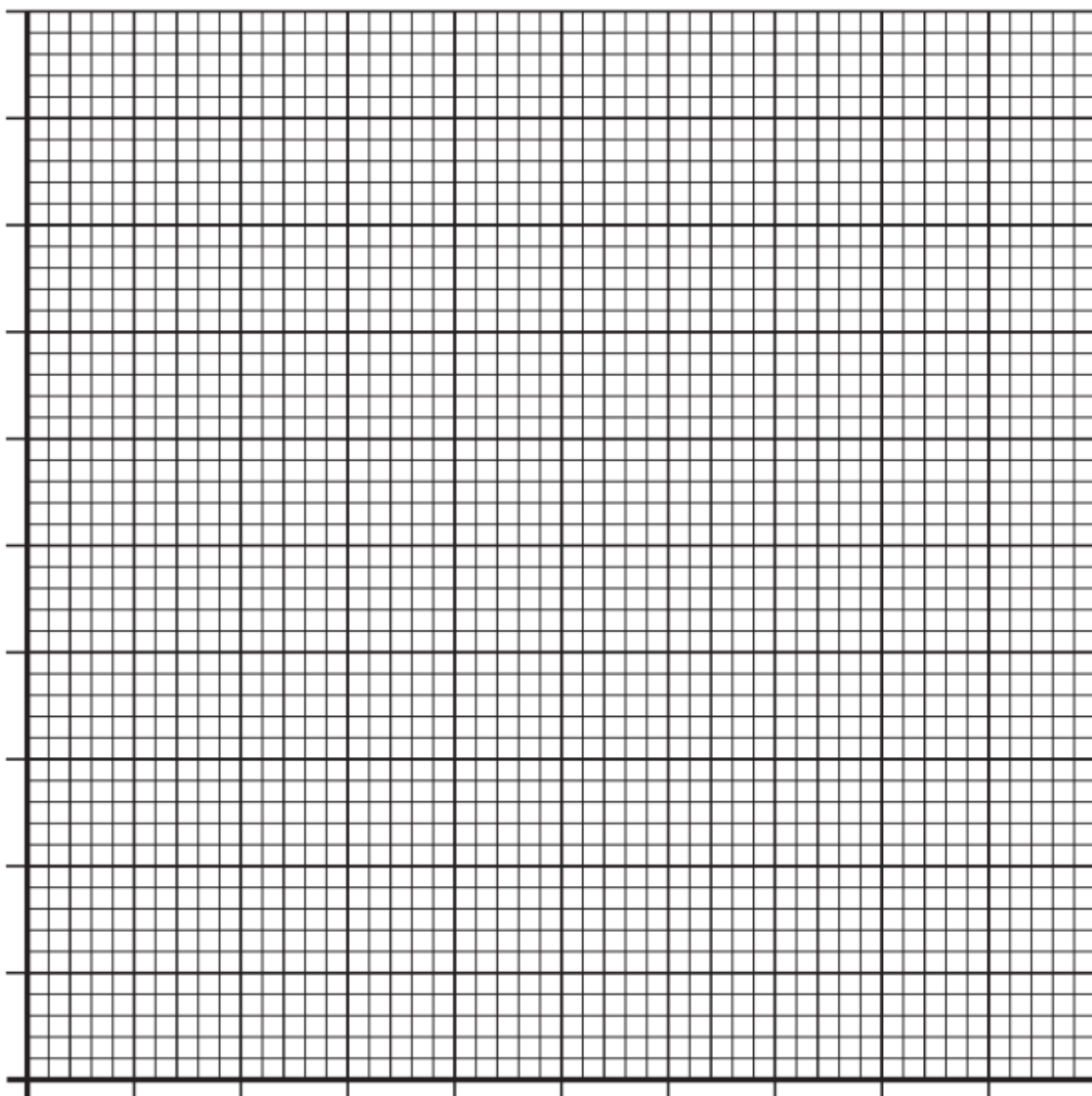
- (ii) Stephen and Michael are the same age and weight.

What evidence from the bar graph shows that Michael is most likely to be an athlete?

4. The table below shows the main **food groups** and the approximate proportion needed for a balanced diet.

Types of Food	%
Carbohydrates	35
Fruits and vegetables	30
Dairy	14
Protein	14
Fats	7

Draw a graph using these results.



**You have reached the end of the
Human Health unit!**

**It is now time to do some revision tasks before
completing your N3 and N4 unit assessments.**