Week 1 Work Pack for Year 3

Work should be completed in the exercise books provided.

	READING	ENGLISH	MATHS	OTHER
Day 1	Read an extract from a book at home which you find challenging. Why is it difficult for you? Decide why you find it difficult and write those reasons down, they will be your reading targets for the week.	Write a persuasive letter to your parents or carers. With your letter you will try to convince them to allow you to have your favourite meal every Tuesday. You'll need to use persuasive language to persuade them.	Look in the cupboards of your kitchen for 4 different packages/containers. What 3D shapes are they? Design the nets of each package.	Science – read the information pack about Marie Curie. Create your own information poster about this amazing Scientist. You can also find out your own information and facts online. You should also include pictures.
Day 2	Ask someone at home to read to you. Think about what they do well and what they could improve on when reading. Feedback you evaluation to them and try to help them grow as a reader.	Create a poem your favourite person in the world. How do they make you feel? What is the special about them?	Make a timeline of your life. Include dates of very important events, such as birthdays, beginning to walk, going to Nursery, starting Reception etc.	Please complete the sheets on labelling parts of the flower and then complete the functions of flowering parts. Learn the parts and functions.
Day 3	Read a newspaper. Your task is to learn the contents of 3 articles so that you can describe the news to someone at home without looking at the newspaper.	Write your own newspaper article. Choose a news story from a newspaper / internet article to write in your own words or write about an issue in school or in your local area. E.g. "The money spent on equipment in school playgrounds is improving."	List 10 things you can do in: 1. A second 2. A minute 3. An hour 4. A day 5. A week 6. A month 7. A year 8. A lifetime	Complete the magnet worksheet. Just fill in the prediction column and we will test this when back in school. Complete the magnetism word search with all the key scientific vocabulary. Then find out the meaning of all the words in the word search and write definitions in your own words.
Day 4	Read your favourite book. Then read a brand new book to yourself. Compare and contrast the two. Make a list of the things you love in books so that you build criteria of things to look out for in the library or at school.	Plan a weekend activity with you family or friends. Consider: - Who you will be with. - Activities that you will do. - How long they will take. - Any plans you will need to make.	Learn your next timetable and relating division facts. Investigate which time tale I follows from. For example, x4 and x 8. Are there any patterns in them?	Science – read the information pack about Alexander Graham Bell. Create your own information poster about this amazing Scientist. You can also find out your own information and facts online. You should also include pictures.

Day 5	Review your reading targets. Have you made progress? How? Read another extract from the challenging book you chose on Monday. Is it any easier? What further targets could you set yourself?	Write a recount about the week that you have had off school. You'll need to include the answers to all of the 5ws: What? When? Where? Why? Who?	A prime number is a number that can only be divided by 1 and itself. Can you work out all the prime numbers between 1 and 100 (Clue: use the timetables and cross off any numbers that are in them!).	Complete the plants end of unit test. Complete the animals including humans end of unit test. Complete any unfinished work from the week.

Marie Curie Fact Sheet

Marie's Life

Marie Curie was born Maria Sklodowska in 1867 in Warsaw, a city in Poland. She lived with her mother, father and four brothers and sisters. Marie's parents were both teachers, and her father taught her the basics of science at a young age. She went to the local schools with her friends, brothers and sisters, and was a good student who excelled in her studies.

After she finished school, Marie worked as a private tutor for children in Poland. She wanted to make some money so she could travel to Paris and study science at the University there. At that time, women were not allowed to go to University in Poland, so Marie knew she had to leave Poland if she wanted to continue her scientific work. At the age of 23 or 24, Marie moved to Paris and attended lessons the the University there. She achieved degrees in both Physics and Maths.

In 1895, Marie married Pierre Curie, a Physics professor. She decided to stay in Paris and live with him. Even though the Curies were poor, they were still able to carry out investigations and scientific research. Marie had heard about the work of Henri Becquerel, who had been finding out about x-rays and uranium. She was inspired to do her own research in this area, and this is when she discovered the two brand new elements. She named the first of these materials 'polonium' after her home country of Poland.

In 1906, Marie was devastated when Pierre was killed in a road accident. She continued working, but she herself died in 1934 as a result of a blood disorder caused by a lifetime of exposure to dangerous radiation.

Achievements

Marie Curie is one of the most famous women in modern science. She achieved many amazing things in her life.

She was the first person to win two Nobel prizes, and is still the only person to win Nobel prizes for both Physics and Chemistry.

Marie Curie was the first female professor at the University of Paris, at a time when women found it hard to be accepted as scientists.

Her discoveries and investigations helped our understanding of radioactivity and radiation, or invisible rays that are given off by some materials.

She worked together with her husband to discover two brand new radioactive elements - radium and polonium.

X-rays

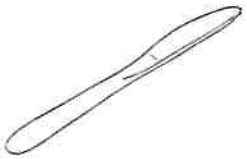
Marie Curie founded the Radium Institute in Paris after her husband's death. Here, she investigated all forms of radiation and radioactivity, including x-rays. X-rays had been discovered in 1895 by Wilhelm Röntgen, and Marie developed the use of x-rays for medical purposes. In 1914, World War One broke out, and Marie created and transported over 200 x-ray machines to field hospitals. It is estimated that over 1 million injured soldiers were photographed by her x-ray machines. Albert Einstein said, 'She helped humanity greatly by her work'.

Did You Know?

Marie Curie's work books and papers are still so radioactive that it is dangerous to handle them. They are stored in lead lined boxes, and anyone who wants to read them must wear a protective suit.

Is It Magnetic?

In the prediction column below write whether you think each object will be attracted to a magnet or not. Test the objects with a magnet and fill in the results column.

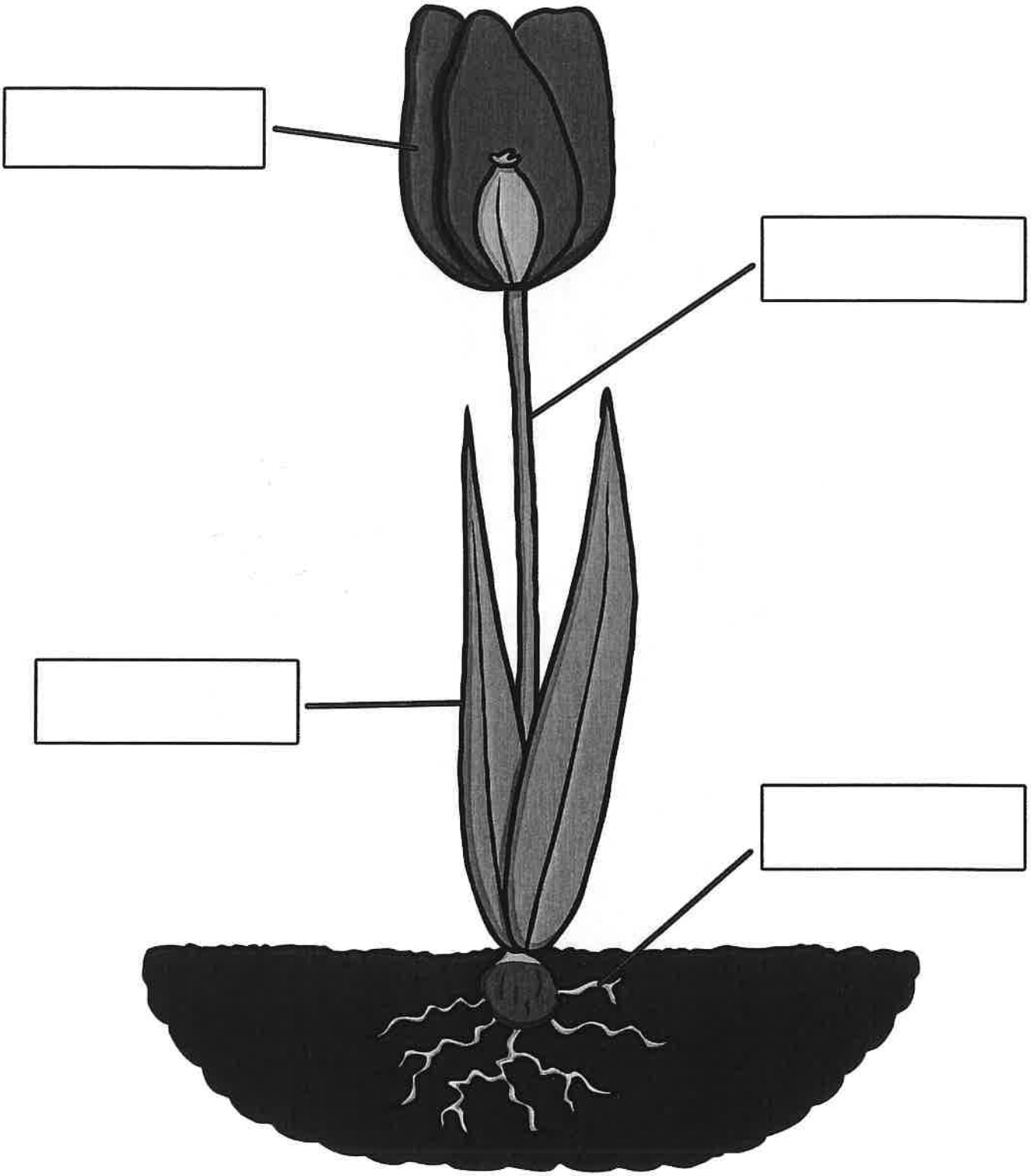
Object	Prediction	Test Result
fork 		
knife 		
spoon 		
'copper' coin 		
'silver' coin 		
pencil 		
drink can 		

Magnetism

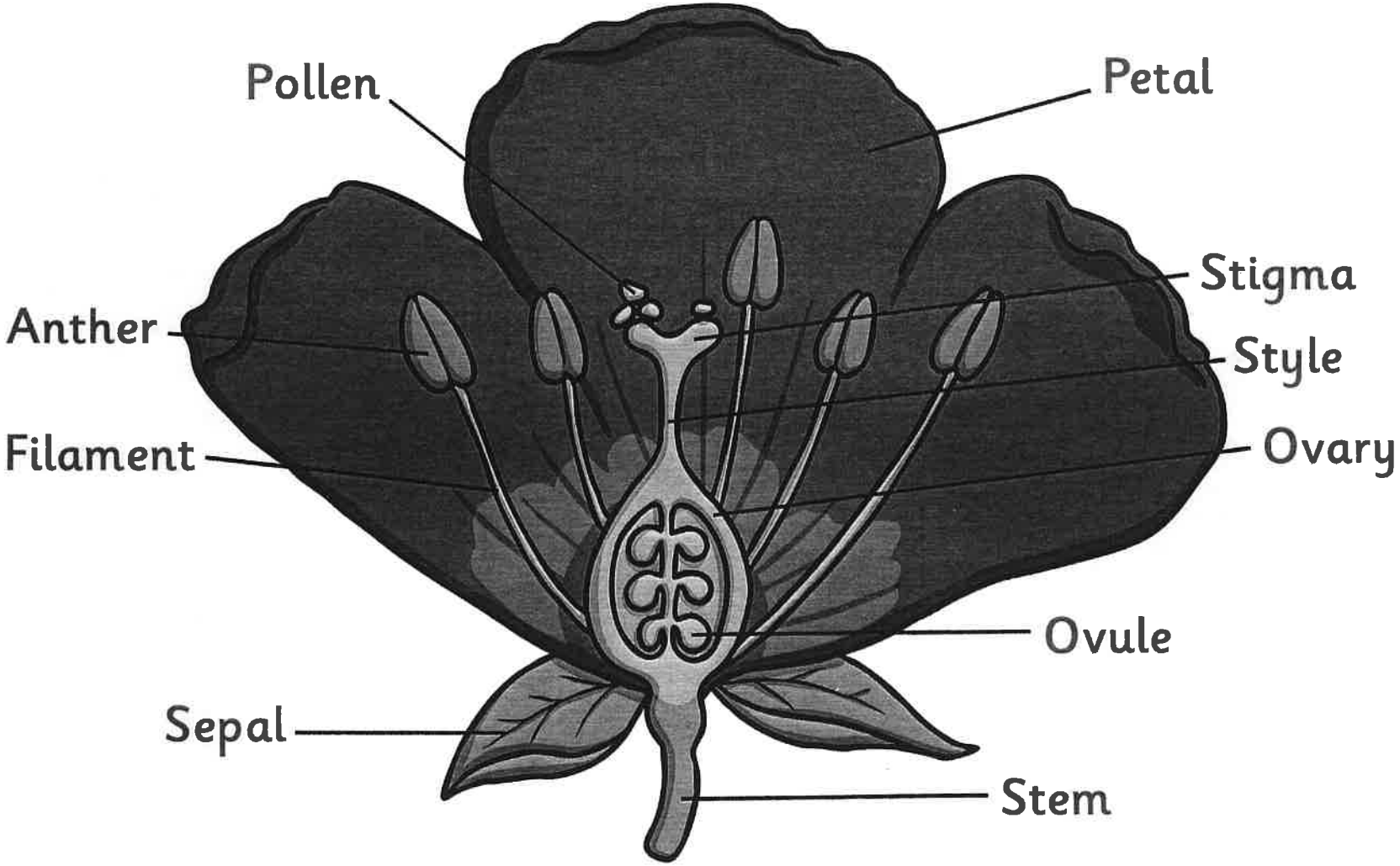
a	t	t	r	a	c	t	h	i	j	k	m
m	n	o	p	q	c	l	o	t	h	w	a
y	a	a	s	t	i	c	k	g	t	i	g
k	l	g	n	s	t	o	n	e	r	u	n
w	x	y	n	a	b	c	d	e	o	r	e
i	s	t	e	e	l	o	p	q	n	u	t
m	a	g	n	e	t	i	s	m	d	b	i
g	h	i	j	k	m	m	n	o	p	b	s
s	o	u	v	r	e	p	e	l	b	e	e
e	f	l	h	i	t	k	l	m	n	r	p
q	r	s	d	u	a	s	o	u	t	h	b
n	i	c	k	e	l	i	j	i	r	o	n

iron	metal	repel	gold
steel	cloth	north	rubber
nickel	magnetise	magnetism	stone
magnet	attract	stick	south

Parts of a Plant



Parts of a Flower



Parts of a Plant

Amazing Fact

Figs contain digested fig wasps, which crawl inside as part of the pollination process and can't get back out.

Challenge

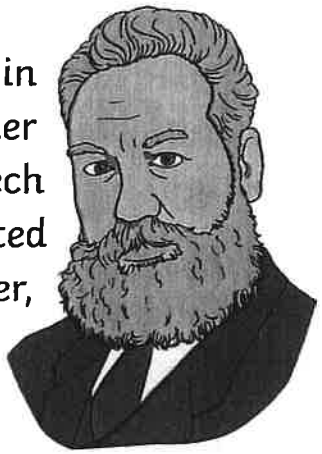
Match up the words and their meanings.

petals	releases pollen which brushes onto insects when they land on a flower
leaves	absorb water and minerals from the soil
stem	attract insects and birds to the plant
roots	make food for the plant from CO_2 and sunlight
anther	transports water around the plant

You could also try to find out:

- about the unusual life cycle of the fig wasp and how figs depend on them;
- about other extraordinary life cycles;
- what pollination is;
- methods used by other plants for pollination.

Alexander Graham Bell



Childhood

Alexander Bell was born in March 1847 in Edinburgh, Scotland. Bell's father, Alexander Melville Bell, was a scientist who studied speech sounds. His mother was Eliza Grace Bell, a talented pianist. Bell was homeschooled by his mother, who tried to give him a sense of curiosity about the world around him.

Telephone Experiments

In the early 1870s, Bell was living and teaching in Boston, America. He spent years trying to invent a way to make the human voice move through electrical wires.

In 1874, he began working with Thomas Watson, a skilled electrician. Together, they continued experimenting with ways to transmit speech.

On 10th March 1876, Alexander and Thomas were working in separate rooms. Alexander made the first ever telephone call, saying: "Mr Watson, come here. I want to see you!" After this, Alexander's life would never be the same again!

Success!

Bell began to show his telephone to the public. The Bell Telephone Company was set up in 1877. By 1886, over 150,000 people in the USA owned telephones.

Did You Know...?

Other scientists tried to say that they had the idea for the telephone first! None were able to prove it.

Work with Deaf People

Alexander Graham Bell's mother was deaf and his father worked with deaf people. Bell's father invented a language called Visible Speech to show how different speech sounds are made.

Bell helped to show how Visible Speech could help deaf people learn and develop their speech. He helped his father teach it to deaf people.

How He Is Remembered

As the telephone became more and more important, Alexander Graham Bell became more and more famous. He received many awards for his invention. Bell died in 1922, aged 75. After his funeral, every telephone on the continent of North America was silenced for one minute.

Did You Know...?

The measures of sound that are still used today, the **bel** and the **decibel**, are named after him.

Name: Date:

/23
total marks

twinkl

Science Assessment Year 3: Animals Including Humans

Nutrition

1. Name one reason why animals and humans need food.

.....

1 mark

2. There are 5 main food groups:

a) Name **two** of them.

.....

b) Which food group does meat belong to?

.....

c) Which food group does bread belong to?

.....

2 marks

Total for this page

3. Join the nutrient to the job it does.

Nutrients	
Vitamins	
Water	
Protein	
Minerals	
Fibre	
Carbohydrates	
Fats	

Nutrients
gives us energy
helps us digest food
repairs our bodies
moves nutrients around and clears waste
keeps us healthy

3 marks

4. About how much water does a child need per day (from drinking and food)?

Circle the correct answer.

10 litres 1.5 litres 0.5 litres 5 litres

1 mark

5. There are two types of fat, 'saturated' and 'unsaturated'.

a) Which one is bad for you if you have too much?

.....

1 mark

Total for this page

b) Name a health problem that can be caused by the bad fat.

.....

1 mark

Skeletons

6. Join the animals to the correct type of skeleton.

Animal
Worm
Human
Butterfly
Jellyfish
Cow
Cat

Skeleton
Vertebrate
Invertebrate

2 marks

7. Some animals have hydrostatic skeletons, give one advantage and one disadvantage of this type of skeleton:

Advantage of having a hydrostatic skeleton	**Disadvantage** of having a hydrostatic skeleton

1 mark

Total for this page

8. Give the scientific names for these bones in the human skeleton:

a) Thigh bone

.....

b) Collarbone

.....

c) Upper arm bone

.....

2 marks

9. Your skeleton has a number of functions, name one of them.

.....

1 mark

10. Your muscles can do voluntary and involuntary movements, write voluntary or involuntary for the following movements:

a) The heart pumping

.....

b) Kicking a ball

.....

c) The muscles in your digestive system

.....

2 marks

11. Muscles work in pairs, name the other one of the pair for:

a) The biceps

.....

1 mark

b) The hamstrings

.....

1 mark

Total for this page

12. There are different types of joints in the body. What sort of joint is the elbow joint?

.....

1 mark

13. Humans have their skeleton on the INSIDE of their bodies, what is the name for this type of skeleton?

.....

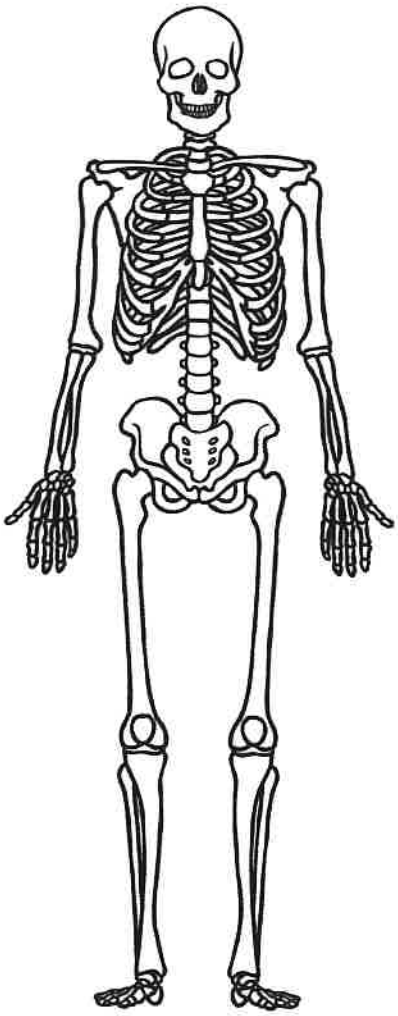
1 mark

14. Look at the diagram of a human skeleton and label these bones:

a) Rib cage

b) Pelvis

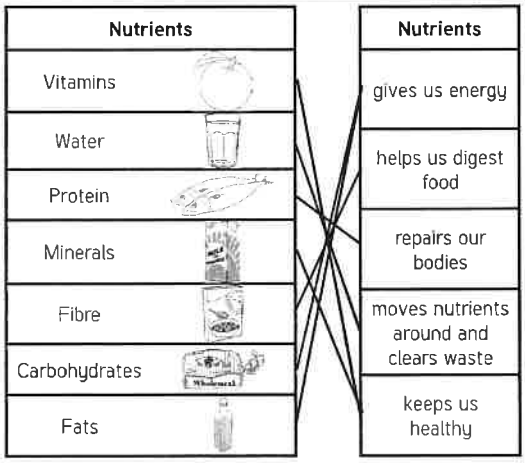
c) Cranium

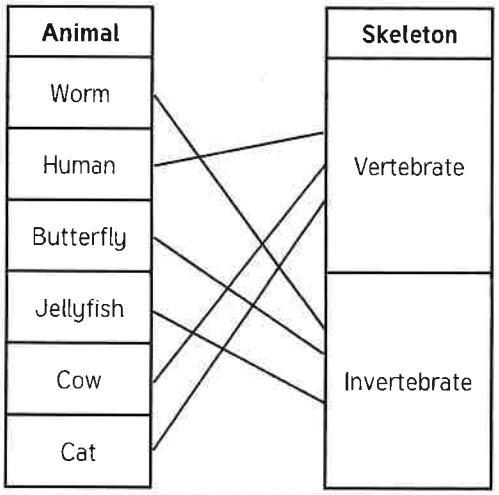


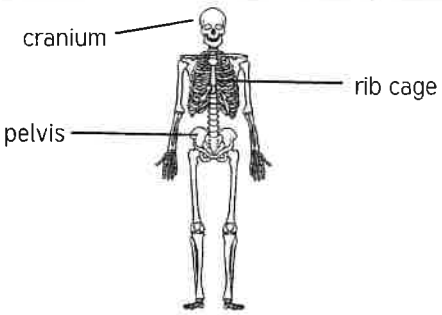
2 marks

Total for this page

Answer Sheet: Science Assessment Year 3:
Animals Including Humans

question	answer	marks	notes
1. Name one reason why animals and humans need food.			
	• (To) grow • (To be) strong • (To be) healthy	1	1 mark for a correct answer.
2. There are 5 main food groups:			
a	1 mark for any from: • Fruit and vegetables • Carbohydrates • Protein • Fats • Dairy	2	Maximum of 2 marks: 0 for 1 correct 1 for 2 correct 2 for 3 correct
b	Protein		
c	Carbohydrates/carbs		
3. Join the nutrient to the job it does.			
		3	Maximum of 3 marks: 0 for 1 correct 1 for 2, 3 or 4 correct 2 for 5 or 6 correct 3 for all 7 correct

question	answer	marks	notes
4. About how much water does a child need per day (from drinking and food)?			
	10 litres **(1.5 litres)** 0.5 litres 5 litres	1	Accept other obvious markings such as a tick. Do not accept more than one circled/ticked.
5. There are two types of fat, 'saturated' and 'unsaturated'.			
a	Saturated (fat)	1	1 mark for the correct answer. Accept spelling errors where the intention of the word is obvious.
b	Heart problems Obesity Narrowing of arteries Stroke	1	1 mark for a correct answer. Do not accept high cholesterol as this causes other problems and is not itself the problem.
6. Join the animals to the correct type of skeleton.			
		2	Maximum of 2 marks: 0 for 1 or 2 correct 1 for 3 or 4 correct 2 for 5 or 6 correct
7. Some animals have hydrostatic skeletons, give one advantage and one disadvantage of this type of skeleton.			
	Advantages: • Flexible • Changes shape (reduced friction and drag) • Squeeze and expand • Faster healing • Lightweight • Protective cushions **Disadvantage:** • Cannot lift things • Muscles and limbs are not attached • Need to be in water	1	1 mark for both a correct advantage and a correct disadvantage.

question	answer	marks	notes
8. Give the scientific names for these bones in the human skeleton:			
a	Femur	2	Maximum 2 marks: 0 for 1 correct 1 for 2 correct 2 for 3 correct
b	Clavicle		
c	Humerus		
9. Your skeleton has a number of functions, name one of them.			
	• Support (the body) • Shape (the body) • Move (the body) • Protect	1	1 mark for a correct answer.
10. Your muscles can do voluntary and involuntary movements, write voluntary or involuntary for the following movements:			
a	Involuntary	2	Maximum 2 marks: 0 for 1 correct 1 for 2 correct 2 for 3 correct Accept spelling errors where the intention is clear.
b	Voluntary		
c	Involuntary		
11. Muscles work in pairs, name the other one of the pair for:			
a	Tricep(s)	1	Accept spelling errors where the intention is clear.
b	Quadriceps/Quads	1	
12. There are different types of joints in the body. What sort of joint is the elbow joint?			
	Hinge (joint)	1	1 mark for the correct answer.
13. Humans have their skeleton on the inside of their bodies, what is the name for this type of skeleton?			
	Endoskeleton	1	1 mark for the correct answer. Accept spelling errors where the intention is clear.
14. Look at the diagram of a skeleton and label these bones:			
		2	Maximum 2 marks: 0 for 1 correct 1 for 2 correct 2 for 3 correct Label lines need to be touching the area of rib cage, pelvis and cranium.
		total 23	

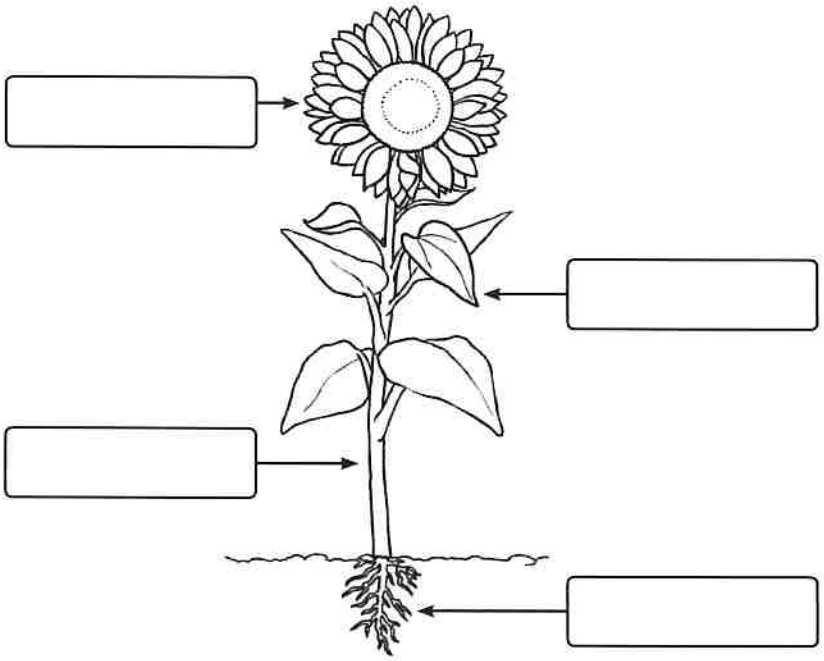
Name: Date:

/25 total marks

Science Assessment Year 3: Plants

Parts of a Plant

1. Label these parts of this plant:



3 marks

2. What jobs do these parts of a plant do?

a) The petals: .....

b) The stem: .....

c) The roots: .....

3 marks

3. Where are food and nutrients made in this plant?

Circle one word.

Roots **Stem** **Petals** **Leaves**

1 mark

Total for this page

4. What is the process of making food in a green plant called?

.....

1 mark

Living Things

5. Mrs Nerg helps us remember what all living things do, name 2 things all living things do.

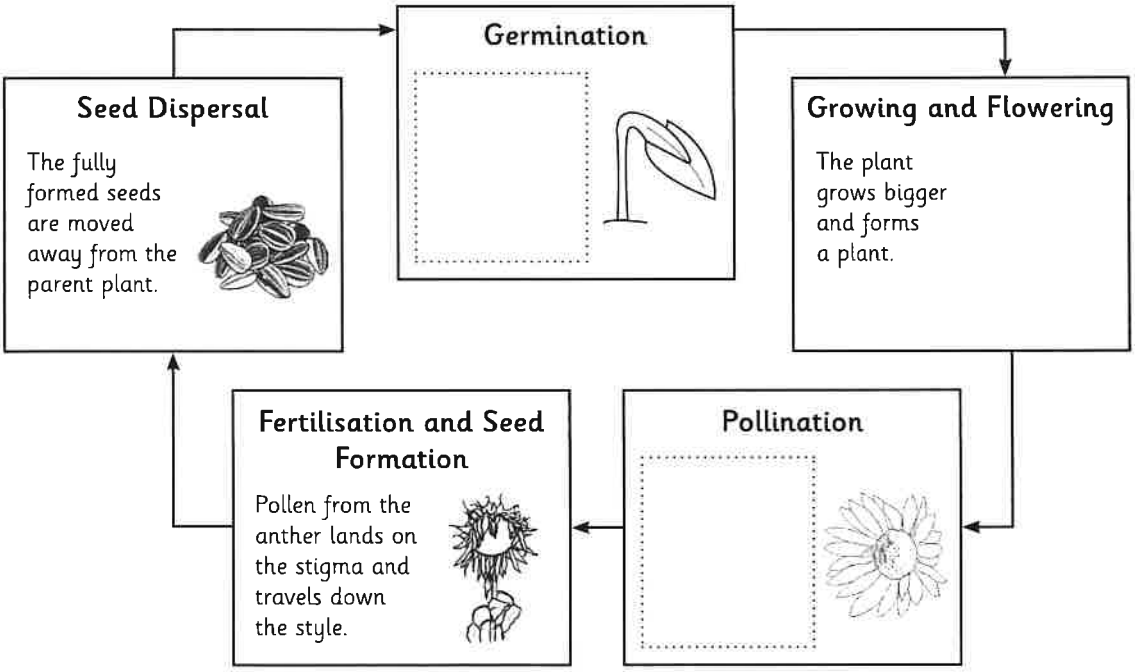
a) .....

b) .....

2 marks

The Lifecycle of a Plant

6. Fill in the missing parts of this lifecycle.



2 marks

7. Name two ways that seeds can be dispersed:

a) .....

b) .....

2 marks

Total for this page

8. Name 2 things that a plant needs to grow:

a) .....

b) .....

2 marks

Planning an Investigation

We need to investigate whether a plant will grow quicker in a warm place than a cold place.

9. What is the one variable we will change in this investigation?

.....

1 mark

10. Name two variables that need to stay the same:

a) .....

b) .....

2 marks

Here are the results of the investigation:

	Plant in the cold shed by the window	Plant in the warm classroom by the window	Plant in the Headteacher's office by the hot radiator
Week 1 Height	0cm	2cm	2cm
Week 2 Height	1cm	4cm	4cm
Week 3 Height	2cm	6cm	died

11. How tall do you think the plant in the cold shed will be in week 4?

cm

1 mark

12. How tall do you think the plant in the warm classroom will be in week 4?

cm

1 mark

Total for this page

13. Why do you think the plant near the hot radiator died?

.....

.....

1 mark

14. Write a conclusion from these results.

.....

.....

1 mark

15. Explain why people grow things in greenhouses.

.....

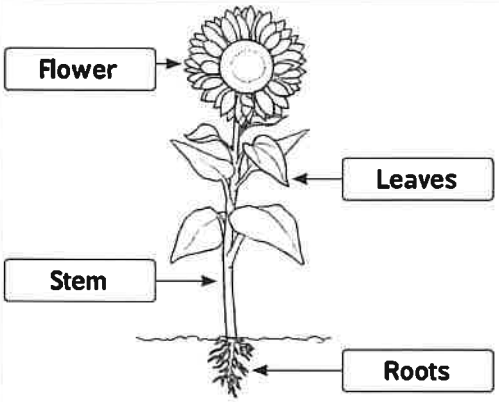
.....

.....

2 marks

Total for this page

Answer Sheet: Science Assessment Year 3:
Plants

question	answer	marks	notes
1. Label these parts of this plant.			
		3	Allow for small errors in spelling if it is obvious what the word is. 1 mark = 2 correct 2 marks = 3 correct 3 marks = 4 correct
2. What jobs do these parts of a plant do?			
a	The petals **attract insects.**	1	Accept either answer for b and c. Accept water or nutrients. Wording does not have to match exactly this example.
b	The stem **holds up the plant / carries water to the flower.**	1	
c	The roots **anchors the plant / carries water or nutrients.**	1	
3. Where are food and nutrients made in this plant?			
	Leaves	1	Do not give marks if more than one is circled.
4. What is the process of making food in a green plant called?			
	Photosynthesis	1	Allow for errors in spelling if it is obvious what the word is.
5. Mrs Nerg helps us remember what all living things do, name 2 things all living things do.			
	1 mark for each answer from any of the following: • Movement • Reproduction • Sensitivity • Nutrition • Excretion • Respiration • Growth	2	Do not accept 'breathe' for respiration. Do not accept 'eat' for nutrition.

question	answer	marks	notes
6. Fill in the missing parts of this lifecycle.			
	1 mark for each space filled in correctly: **Germination acceptable answers:** • The seed starts to grow • Green shoots appear / show **Pollination acceptable answers:** • Bees / insects take pollen from one plant to another • Pollen fertilises the egg • Pollen moved from one plant to another by birds, bats or wind.	2	Do not accept: The plant grows (rather than 'starts' to grow) Accept bee or insect. Also accept other forms of pollination e.g. birds, bats, wind.
7. Name two ways that seeds can be dispersed:			
	1 mark each for any two from: • Wind • People / animals (burrs) • Water (coconuts) • Explosive / self-propelled • Eaten by animals / in animal excretion	2	Do not accept soil.
8. Name 2 things that a plant needs to grow:			
	1 mark each for any two from: • Warmth • Light • Water • Air • Nutrients	2	
9. What is the one variable we will change in this investigation?			
	1 mark for: The place where the plant is kept.	1	
10. Name two variables that need to stay the same:			
	1 mark each for any two from: • amount of water given • type of plant / seed • amount of soil • size of plant pot • amount of light • amount of air • amount of nutrients / plant feed	2	
11. How tall do you think the plant in the cold shed will be in week 4?			
	1 mark for any of: • 3cm • 3 • Any answer 2.5cm>5cm	1	

question	answer	marks	notes
12. How tall do you think the plant in the warm classroom will be in week 4?			
	1 mark for any of: • 8cm • 8 • Any answer 8.5cm>11.5cm	1	
13. Why do you think the plant near the hot radiator died?			
	1 mark for: • Too hot	1	Do not give marks for other responses that would indicate an unfair test e.g. 'not watered', 'someone broke it', etc.
14. Write a conclusion from these results.			
	1 marks for answers that mention **both** the temperature **and** the height / speed of growth for example: • The coldest place makes the plants grow slower • A warm place makes plants grow higher / quicker.	1	No marks for answers that only mention **either** the temperature **or** the height.
15. Explain why people grow things in greenhouses.			
	2 marks for answers that link the findings of this investigation to a warm greenhouse: • Plants grow better in a warm place and a greenhouse is warm 1 marks for answers that only mention one element: • Greenhouses are warm • Plants like it warm	2	
		total 25	