Name: Date:

25 total marks

Science Assessment Year 5: Living Things and Their Habitats

Reproduction

1. There are two types of reproduction. Fill in this table to complete what you know about them:

	Sexual Reproduction	Asexual Reproduction
How many parents?		
What do the offspring look like?		
An advantage		
A disadvantage		

3 marks

Plant Reproduction

2. Complete the blanks in this sentence about plant reproduction:

Female plants cells are found in..... and male cells are found in .....

2 marks

3. Name a way that an asexual plant reproduces.

.....

1 mark

Total for this page

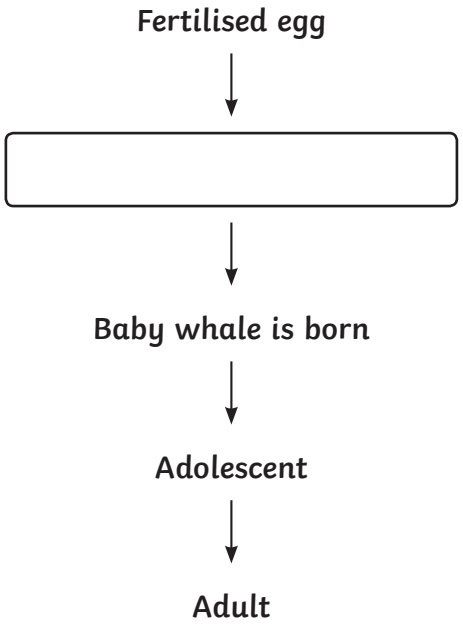
Mammals

4. Name a characteristic of mammals.

.....

1 mark

5. Fill in the blank space for the lifecycle of a whale:



1 mark

6. There are three types of mammals. Fill in the table below with more detail:

	Marsupials	Monotremes	Placentals
a. What type of mammal is a kangaroo?			

- What is a baby kangaroo called?

_____

c. What makes this type of mammal different from other types of mammal?

_____

_____

_____

3 marks

Total for this page

Amphibians and Insects

7. An animal with a backbone is called a _____ whilst an animal without a backbone is called an _____.

.....

1 mark

8. What is metamorphosis?

.....

.....

1 mark

9. How do amphibians metamorphose?

.....

.....

1 mark

10. Explain how insects metamorphose.

.....

.....

1 mark

Birds

11. What grows inside a fertilised bird's egg?

.....

1 mark

12. What happens if an egg is not fertilised?

.....

1 mark

Total for this page

13. Number these stages in the order they come in the life cycle of a bird.

Number	
	Egg hatches and adults provide food
	A fertilised egg is laid by the female
	The chick grows and develops
	The young bird leaves the nest
	The adults mate and reproduce

2 marks

Similarities and Differences

14. Fill in this table of similarities and differences with **one** example for each box.

	Similarity	Difference
Bird and Amphibian		
Mammal and Insect		
Bird and Mammal		
Amphibian and Insect		
Mammal and Amphibian		
Bird and Insect		

6 marks

Total for this page

Answer Sheet: Science Assessment Year 5:
Living Things and Their Habitats

<table>
<tr><th>question</th><th>answer</th><th>marks</th><th>notes</th></tr>
<tr><td colspan="4">1. There are two types of reproduction. Fill in this table to complete what you know about them.</td></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>Sexual Reproduction</td><td>Asexual Reproduction</td></tr>
<tr><td>How many parents?</td><td>2</td><td>1</td></tr>
<tr><td>What do the offspring look like?</td><td>A mix of the two parents</td><td>A clone/exact copy of the parent</td></tr>
<tr><td>An advantage</td><td>Any from:
• The species can change over time
• Diseases do not affect all example as they are all a bit different</td><td>Any from:
• Only one parent is needed
• Population can increase quickly
• Good features are always passed on</td></tr>
<tr><td>A disadvantage</td><td>Any from:
• Reproduction not possible with one isolated plant/ animal
• Time and energy needed to wait for reproduction</td><td>Any from:
• No variation or difference so cannot adapt as well to changes in climate, habitat or diseases</td></tr>
</table>
</td><td>3</td><td>0 marks for 0–2 correct
1 mark for 3–5 correct
2 marks for 6–7 correct
3 marks for 8 correct</td></tr>
<tr><td colspan="4">2. Complete the blanks in this sentence about plant reproduction.</td></tr>
<tr><td></td><td>Female plants cells are found in ovules and male cells are found in pollen.</td><td>2</td><td>0 marks for 0 correct
1 mark for 1 correct
2 marks for 2 correct

Do not accept ‘eggs’ instead of ‘ovules’ as this question refers to plants only.</td></tr>
<tr><td colspan="4">3. Name a way that an asexual plant reproduces.</td></tr>
<tr><td></td><td>• Bulbs
• Tubers
• Side shoots
• Runners
• Plantlets
• Branches with plantlets/baby plants</td><td>1</td><td></td></tr>
<tr><td colspan="4">4. Name a characteristic of mammals.</td></tr>
<tr><td></td><td>• Feed babies their milk
• Have hair
• Warm blooded
• (give birth to live babies)</td><td>1</td><td>Accept live babies as most mammals do this. Make sure that children know in feedback that special mammals called ‘monotremes’ do lay eggs.

There is currently debate about the taxonomy of Monotremes.</td></tr>
</table>

<table>
<tr><th>question</th><th>answer</th><th>marks</th><th>notes</th></tr>
<tr><td colspan="4">5. Fill in the blank space of this lifecycle of a whale.</td></tr>
<tr><td></td><td>• Embryo
• Foetus</td><td>1</td><td>Accept errors in spelling where the intention is clear.</td></tr>
<tr><td colspan="4">6. There are three types of mammals. Fill in the table below with more detail:</td></tr>
<tr><td></td><td><table><tr><th></th><th>Marsupials</th><th>Monotremes</th><th>Placentals</th></tr><tr><td>a) What type of mammal is a kangaroo?</td><td>A kangaroo is a Marsupial.</td><td></td><td></td></tr></table>b) A Joey
c) they have a pouch (where the baby is kept after birth).</td><td>3</td><td>1 mark for each correct answer.</td></tr>
<tr><td colspan="4">7. Complete the blanks on Amphibians and Insects.</td></tr>
<tr><td></td><td>An animal with a backbone is called a <u>vertebrate</u> whilst an animal without a backbone is called an <u>invertebrate</u>.</td><td>1</td><td>1 mark for both correct answers with recognisable spelling.</td></tr>
<tr><td colspan="4">8. What is metamorphosis?</td></tr>
<tr><td></td><td>Animals that change to a different thing in their life cycle</td><td>1</td><td>Accept more complicated explanations with KS3 definitions.</td></tr>
<tr><td colspan="4">9. How do amphibians metamorphose?</td></tr>
<tr><td></td><td>They start life in the water and change into an adult that lives on land (and in water)</td><td>1</td><td></td></tr>
<tr><td colspan="4">10. Explain how insects metamorphose.</td></tr>
<tr><td></td><td>From Larva/e to insect/s</td><td>1</td><td>Include more complicated explanations that give examples but include these basic facts. Accept ‘grub’ or other word describing the larva stage, but make sure the word larva is reiterated in feedback as the scientific/correct word.</td></tr>
</table>

<table>
<tr><th>question</th><th>answer</th><th>marks</th><th>notes</th></tr>
<tr><td colspan="4">11. What grows inside a fertilised bird's egg?</td></tr>
<tr><td></td><td>embryo</td><td>1</td><td>Do not accept 'baby chick' or similar as children need to use the correct scientific word in this case.</td></tr>
<tr><td colspan="4">12. What happens if an egg is not fertilised?</td></tr>
<tr><td></td><td>• No chick can develop
• There is no embryo
• A baby chick cannot be made
• We can eat it</td><td>1</td><td></td></tr>
<tr><td colspan="4">13. Number these stages in order they come in the life cycle of a bird.</td></tr>
<tr><td></td><td><table><tr><td>Number</td><td></td></tr><tr><td>3</td><td>Egg hatches and adults provide food</td></tr><tr><td>2</td><td>A fertilised egg is laid by the female</td></tr><tr><td>4</td><td>The chick grows and develops</td></tr><tr><td>5</td><td>The young bird leaves the nest</td></tr><tr><td>1</td><td>The adults mate and reproduce</td></tr></table></td><td>2</td><td>0 marks for 0-1 correct
1 mark for 2-4
2 marks for 5 correct</td></tr>
</table>

<table>
<tr><th>question</th><th>answer</th><th>marks</th><th>notes</th></tr>
<tr><td colspan="4">14. Fill in this table of similarities and differences with one example for each box.</td></tr>
<tr><td></td><td>
<table>
<tr><th></th><th>Similarity</th><th>Difference</th></tr>
<tr><td>Bird and Amphibian</td><td>Any from:
• Most adults can live on land (eg. Not whales)
• Lay eggs
• Vertebrates
• Omnivorous
• (Most have sexual reproduction)
• Any example from Mrs Gren
• Both in Animal Kingdom in taxonomy
• Both Eukaroyta Domain in taxonomy</td><td>Any from:
• Amphibians start life in water
• Adults amphibians live on land and in water
• Bird lay hard-shelled eggs, amphibians have soft-shelled eggs.
• Warm/ cold-Kingdom in blooded taxonomy
• A few amphibians are asexual</td></tr>
<tr><td>Mammal and Insect</td><td>Any from:
• (Most have sexual reproduction from two parents)
• Any example from Mrs Gren Both in Animal Kingdom in taxonomy
• Both Eukaroyta Domain in taxonomy</td><td>Any from:
• Mammals are vertebrates, Insect are invertebrates
• Mammals are warm-blooded, insects are cold-blooded.</td></tr>
<tr><td>Bird and Mammal</td><td>• Warm blooded
• vertebrates
• taxonomy both are animals
• both can be pets
• both reproduce
• both can be eaten
• 4 chambered hearts</td><td>• Live young/lay eggs
• Baby grows inside the mother/grows inside the egg.
• Feathers v. fur/hair
• Hollow bones/not hollow bones
• Teeth/no teeth
• Flying can only be a difference of bats are noted as being an exception.</td></tr>
<tr><td>Amphibian and Insect</td><td>• Metamorphosis
• both reproduce
• both can be eaten
• cold-blooded (most insects are)
• lay eggs</td><td>• insects don't have lungs
• gills on amphibians
• vertebrate/invertebrate
• most insects have 6 legs</td></tr>
<tr><td>Mammal and Amphibian</td><td>• taxonomy both are animals
• both can be pets
• both reproduce
• both can be eaten</td><td>• Fur/hair v. no fur/hair
• amphibians cold-blooded
• gills on amphibians</td></tr>
<tr><td>Bird and Insect</td><td>• Lay eggs
• both can be eaten
• both can(some) have wings/fly
• light bodies</td><td>• insects don't have lungs
• vertebrate/invertebrate
• most insects are cold-blooded</td></tr>
</table>
</td><td>6</td><td>0 marks for 0–1 boxes correct
1 mark for 2 boxes correct
2 marks for 4 boxes correct
3 marks for 6 boxes correct
4 marks for 8 boxes correct
5 marks for 10 boxes correct
6 marks for 12 boxes correct

There are many differences, so also include any others you know are correct.</td></tr>
<tr><td colspan="2"></td><td>total 25</td><td></td></tr>
</table>