

Name:

Date:

Science Assessment Year 6: Living Things and Their Habitats

Classifying

1. What is the name given to scientists who sort and classify living things into groups?

.....

1 mark

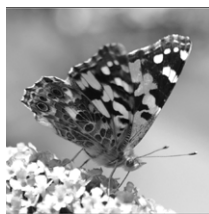
2. Give two different ways that these animals could be sorted into two groups:



starling



jackdaw



painted lady butterfly



cabbage white butterfly



hedgehog



toad



frog



dragonfly

Photo courtesy of Wildlife Boy1, Maxwell Hamilton, Robert.Pittman, foxypar4, DncnH, rodtuk, troutcolor, tsbl2000@flickr.com) - granted under creative commons licence

	Group A	Group B
Option 1		
Option 2		

2 marks

3. What did Carl Linnaeus create and why?

.....
.....

2 marks

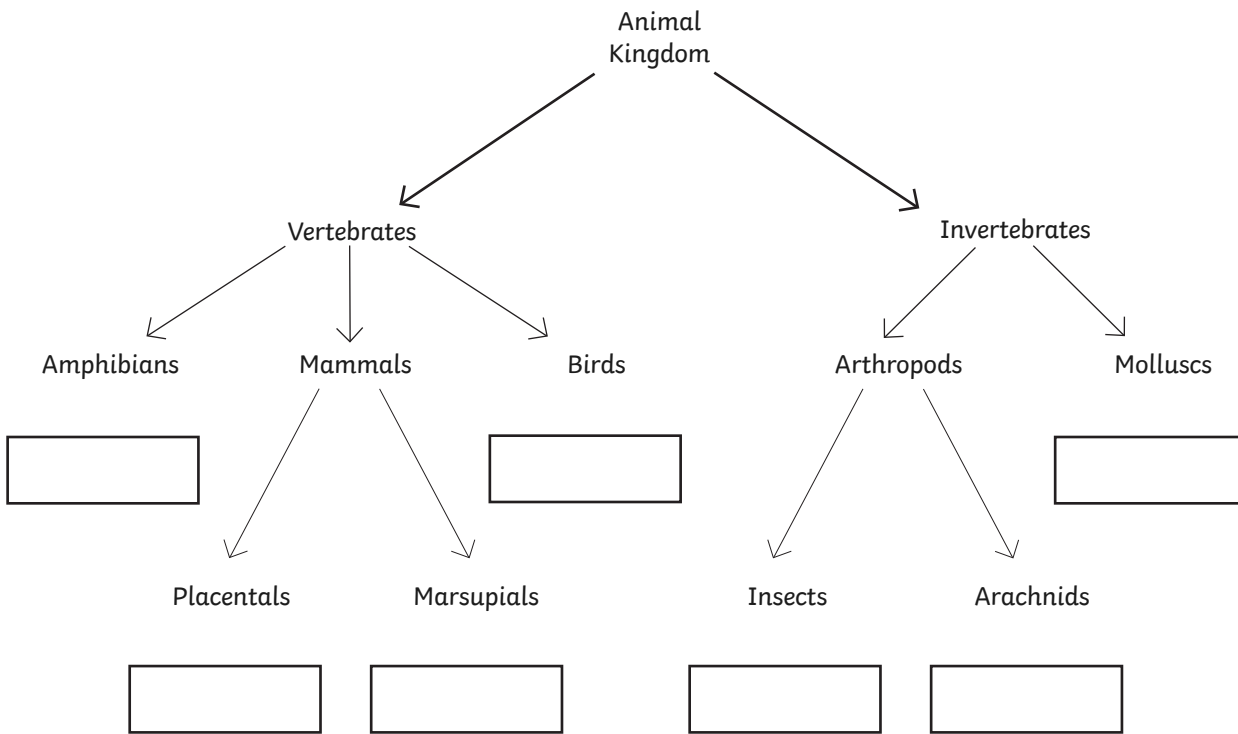
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4. We sort living things into different groups at different levels. What is the name of the original level of groupings that included 'animal' and 'plant'?

1 mark

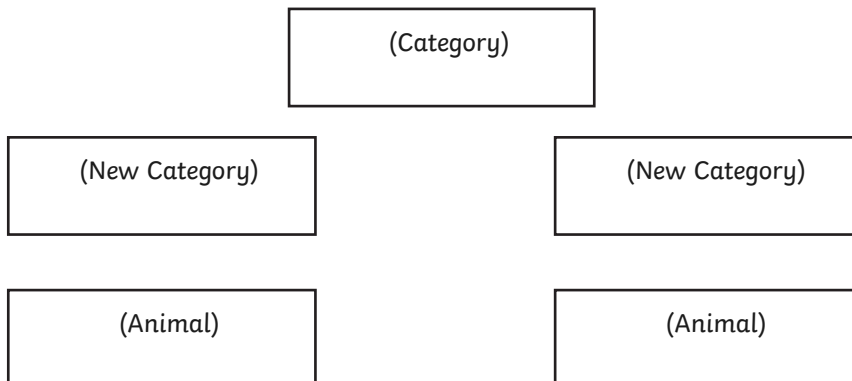
5. a) Use the key below to sort the following animals. Write the name of each animal and the correct end box.

Kangaroo	Spider	Human	Ant	Fox	Snail	Seagull	Frog
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7 marks

b) After completing the previous question, you should have one box with two answers. Using the key below, create another category which can be used to separate them. Start by writing in the category they are both in:

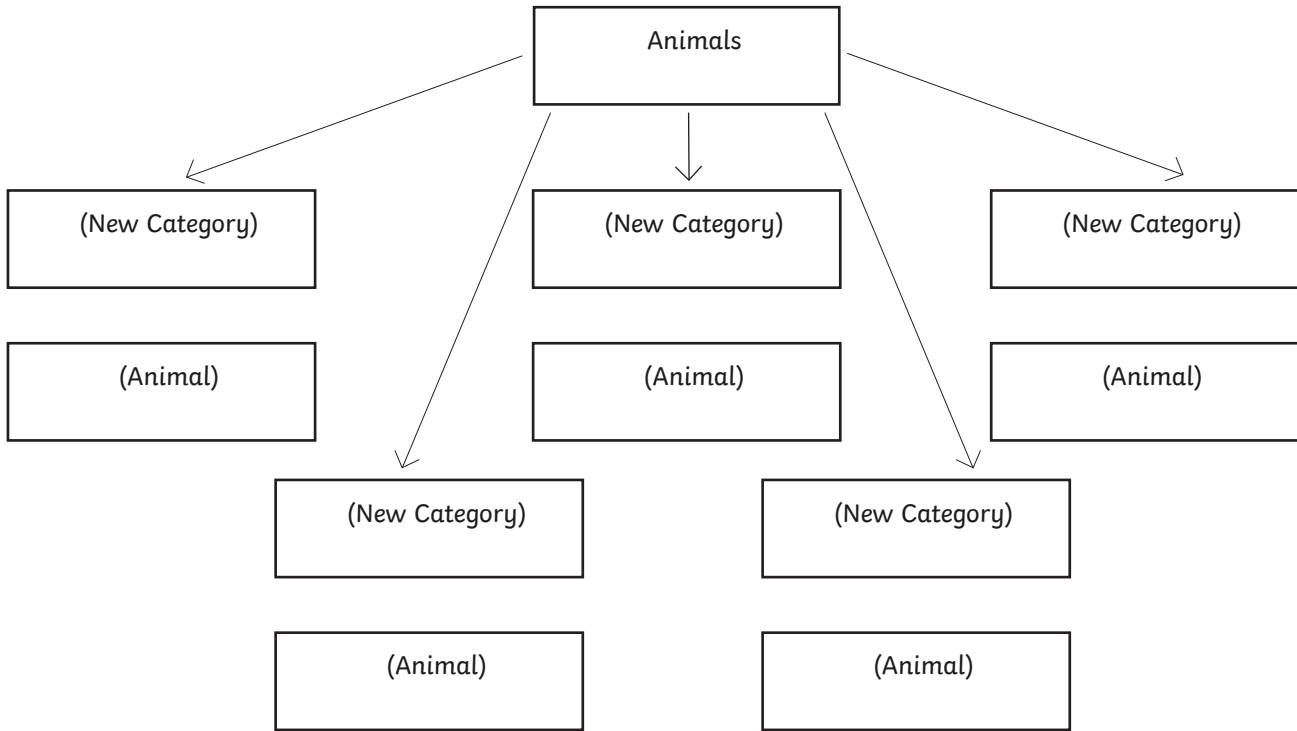


1 mark

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6. a) Here are some animals to classify into groups. Write the different groups that each animal could be sorted into.

Shark	Ladybird	Eagle	Newt	Crocodile
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4 marks

b) What makes the ladybird different to all the other animals in this key?

.....

1 mark

total for this page

7. What class of animal is a fox?

1 mark

Microorganisms

8. Name the three types of microorganisms.

1 mark

9. Which type of microorganism is unusual and why are scientists disagreeing whether it should be classed as a microorganism or not?

1 mark

10. Fill in the table below showing examples of helpful and harmful microorganisms, one has been done for you:

Type of microorganism	Name	Harmful or Helpful?	How is it harmful or helpful?
Fungus	Yeast	Helpful	Makes bread rise.
		Harmful	
		Helpful	

2 marks

11. Name a way that food is preserved to stop it going mouldy quickly.

1 mark

12. Name one of the conditions that help mould grow well.

1 mark

END OF TEST

total for this page

Answer Sheet: Science Assessment Year 6:

Living Things and Their Habitats

question	answer	marks	notes
1. What is the name given to scientists who sort and classify living things into groups?			
	1 mark for: <ul style="list-style-type: none">• Taxonomist/s	1	Accept errors in spelling where the intention is clear.
2. Give two different ways that these animals could be sorted into two groups:			
	1 mark each for any two from the following areas: <ul style="list-style-type: none">• Wings/no wings• Classes based on number of legs• Insects/not insects• Come from eggs/not• Classes based on taxonomy categories	2	Accept errors in spelling where the intention is clear.
3. What did Carl Linnaeus create and why?			
	1 mark for any from: System: <ul style="list-style-type: none">• Linnaean system• A system to classify items /things• The basis of the taxonomy tree• Wrote the Systema Naturae• binomial nomenclature 1 mark for any from: Reason: <ul style="list-style-type: none">• Needed a way of everyone classifying / grouping in the same way.• Things can be grouped in all sorts of different ways, so needed one way.• Scientists were grouping in different ways and getting different results.• The need for a common system.• Any negative for not having a common system.	2	Accept errors in spelling where the intention is clear.
4. We sort living things into different groups at different levels. What is the name of the original level of groupings that included 'animal' and 'plant'?			
	1 mark for: <ul style="list-style-type: none">• Kingdom/s	1	

question	answer	marks	notes
5. a) Use the key below to sort the following animals. Write the name of each animal and the correct end box.			
		7	1 mark for each totalling 7
5. b) After completing the previous question, you should have one box with two answers. Using the key below, create another category which can be used to separate them. Start by writing in the category they are both in:			
	<p>Answer 1 mark for each new category: any sensible and correct classification such as 2 legs/4 legs or hair /fur for human /fox.</p> <p>If there are incorrectly placed answers in question 5 a) then any further correct classification of an incorrectly placed pair will still get the marks.</p>	1	
6. a) Here are some animals to classify into groups. Write the different groups that each animal could be sorted into.			
	<p>Answers (in any order) for a total of 4 marks:</p> <p>Bird (Aves) - Eagle Fish (Chondrichthyes) – Shark Reptile (Reptilia) – Crocodile Amphibian (Lissamphibia) - Newt Insect (Insecta) – Ladybird</p> <p>Also accept Linnaeus classification used correctly (shown here in brackets).</p>	4	0 marks for 1 correct, 1 mark for 2 correct, 2 marks for 3 correct, 3 marks for 4 correct, 4 marks for 5 correct.
6. b) What makes the ladybird different to all the other animals in this key?			
	The ladybird is an invertebrate (all the others are vertebrates).	1	
7. What class of animal is a fox?			
	1 mark for: <ul style="list-style-type: none"> Mammalia/mammals 	1	
8. Name the three types of microorganisms.			
	1 mark for all of: <ul style="list-style-type: none"> Bacteria Fungi /fungus (not mould) Virus 	1	(NB: All moulds are fungi but not all fungi are moulds)

question	answer	marks	notes
9. Which type of microorganism is unusual and why are scientists disagreeing whether it should be classed as a microorganism or not?			
	1 mark for the answer and the explanation: Answer: <ul style="list-style-type: none"> • Virus Explanation from: <ul style="list-style-type: none"> • It is not living • It has to live on something else /not on its own 	1	
10. Fill in the table below showing examples of helpful and harmful microorganisms, one has been done for you:			
	1 mark for each example from examples such as: Harmful: <ul style="list-style-type: none"> • Fungus: mould on food • Fungus: athlete's foot or other infections on the body • Virus: making people /animals ill • Bacteria: food poisoning • Bacteria: tooth decay Helpful: <ul style="list-style-type: none"> • Fungus: yeast in bread making • Bacteria: in live yoghurt • Bacteria: to make milk/cheese • Fungus: yeast makes alcohol/wine • Fungus: used in medicines/penicillin • Bacteria: decomposing things /in soil 	2	Also include other correct examples. NB: there must be one harmful and one helpful example.
11. Name a way that food is preserved to stop it going mouldy quickly.			
	1 mark for any from: <ul style="list-style-type: none"> • Freezing • Vacuum packed • Salting/curing • Tinned • Refrigerate • Additives/chemicals • Add sugar • Smoking • Dried food • Irradiation 	1	
12. Name one of the conditions that help mould grow well.			
	1 mark for any from: <ul style="list-style-type: none"> • Warmth • Damp • Stagnant air • Food/something to grow on 	1	
		Total 26	