



Explore and Discover...

Creepy crawlies

Beat the bug puzzle



Explore the gallery and learn more about the lives of these animals and how they survive in their habitats.

Gallery visited (please see accompanying map)	 Creepy Crawlies
Suitable for	 Key Stage 2 (ages seven to 11)
Curriculum links	QCA Science Unit 4B: Habitats QCA Science Unit 6A: Interdependence & Adaptation NC Science: Life Processes & Living Things 1c, 4b, 4c, 5b, 5c
Example page	www.nhm.ac.uk/creepy-crawlies-ks2
Pre-visit preparation	<ul style="list-style-type: none"> • vocabulary: life cycle, chrysalis, larva, pincers, adaptations • a basic understanding of what invertebrates are







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Activities within the guide

The children will be asked to complete six challenges:

	Challenge	Description
	1. Research challenge	Find out some information about the invertebrate group
	2. Adaptation challenge	Explore how the mouthparts and limbs of invertebrates are adapted
	3. Life cycle challenge	Look at the life cycles of a selection of invertebrates
	4. Prey challenge	Find out how pincers are used in the invertebrate world
	5. Star challenge	Explore the gallery and choose a Star Creepy Crawly of the week
	6. Comparing challenge	Compare millipedes and centipedes

These can be done in any order within the gallery. Depending on how many challenges the children complete, they can reach these levels:

- researcher (two challenges completed)
- scientist (four challenges completed)
- professor (six challenges completed)

Certificates

On return to school, certificates (available at the end of this document) can be printed out and awarded, depending on the number of challenges completed.

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Techniques

There are a range of techniques used within the guide. To complete the challenge, children will be required to:

- make choices based on observation
- write short answers
- choose appropriate descriptive vocabulary
- make decisions about an animal's adaptations based on physical features
- make sketches
- discuss answers with a partner
- extract information from exhibits and their information boards

Follow-up activities

- **Award ceremony**

Print out certificates and have an award ceremony.

- **Science/ICT/Literacy**

Research some less well known invertebrate life cycles and create a display about them. Use your information to make a book or a presentation to the rest of the class.

- **Literacy/ICT**

Create an information leaflet about an invertebrate. This could be an informative text, or a care guide on how to look after an invertebrate pet. This could be created on the computer.

Suggested answers for challenges



Research challenge

Question 3: Arthropods.

Question 4: Crabs and related species, centipedes and millipedes, spiders and related species, insects.

Question 7: The crab has to shed its skeleton so it can grow or increase in size (its skeleton can't expand).



Adaptation challenge

Question 2: Hawk moth has mouthparts like a straw, used to sip nectar from plants. The common bluebottle has mouthparts like a sponge, used to soak up nutrient soup (after vomiting digestive juices over food). The assassin bug has mouthparts like a syringe.

Question 3: Answers will vary, but might include statements such as 'Sometimes, I feed like a dragonfly because I use my jaws to grab food'.

Question 4: Lobster – cracker, preying mantis – pliers, barnacle – net.

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Life cycle challenge

Question 1: Children need to draw the life cycle using the model to support them.

Question 2: Young mayfly eats plants, adult mayfly eats nothing. Hoverfly larva eats aphids, adult hoverfly eats nectar or pollen. Adult barnacle eats food from the water.



Prey challenge

Question 1: A ghost crab uses its pincers for tearing apart its victims. An earwig uses its pincers to trap a fly (or to trap prey).

Question 2: Answers will vary, but students could draw pincers from a scorpion, earwig or ghost crab.

Question 3: The poison from a black widow spider is strong enough to kill a human ('not' should be crossed out). Tropical centipedes inject poison into their prey and eat large insects, lizards and small mammals ('small' should be crossed out and replaced with 'large insects, lizards and small mammals').



Star challenge

Answers will vary – children may choose to draw any creepy crawly in the gallery.



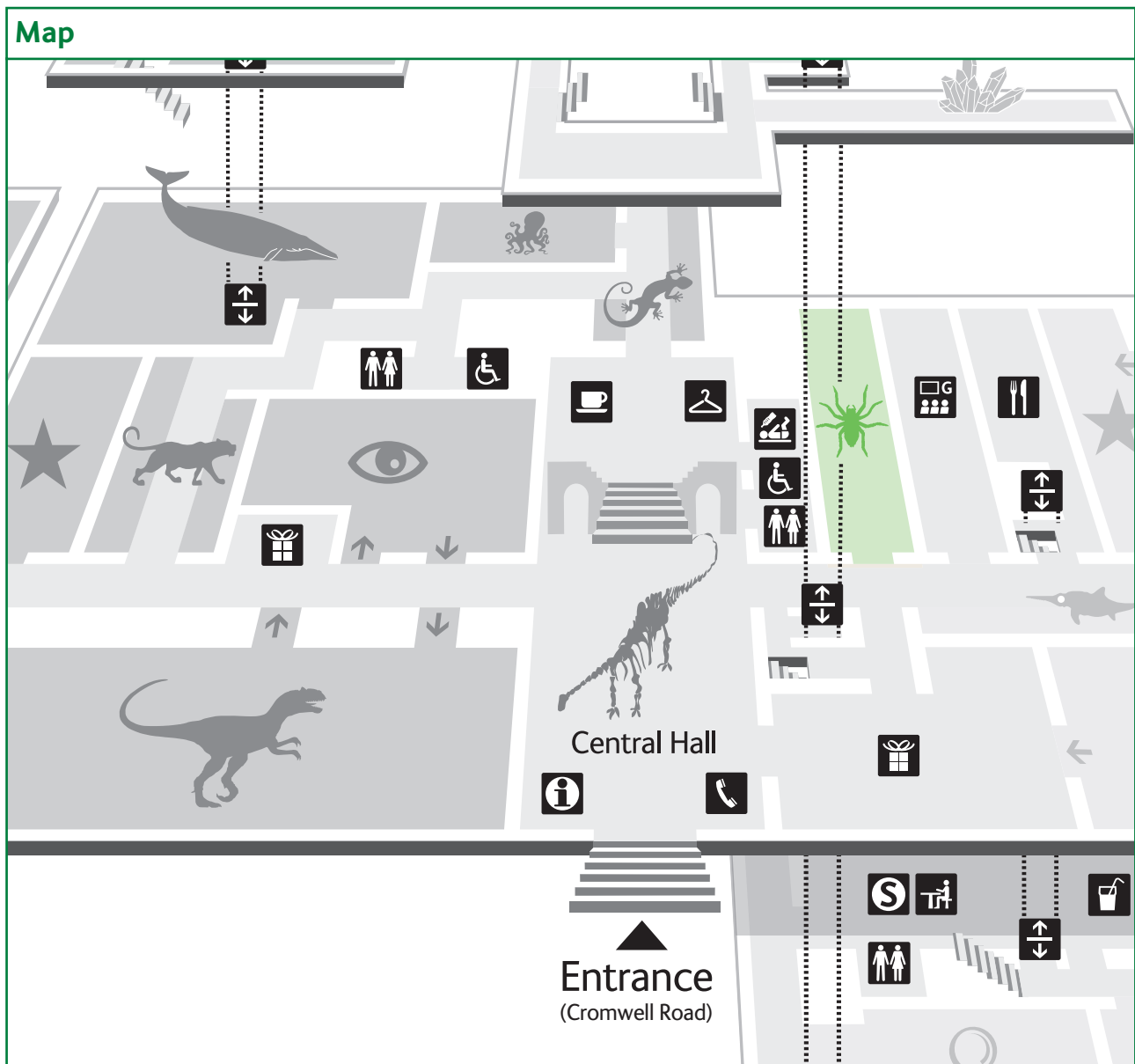
Comparing challenge

Question 2:

	Centipede	Millipede
How many legs per segment	Two (one pair)	Four (two pairs)
Does it eat meat?	Yes	No
Can it roll up?	No	Yes
Can it swim?	Yes	No
Is it fast for its size?	Yes	No

Question 3: Answers will vary, but may include the following. The centipede's speed enables it to chase its prey (meat). The millipede can roll into a ball for protection (because it is slow, it can't run to escape predators).

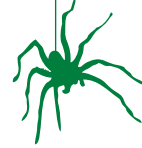
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A larger, full-colour version of this map showing the whole Museum is available at reception when you arrive.



Certificate



This is to certify that



became a

researcher



in the Explore and Discover... Creepy crawlies challenge

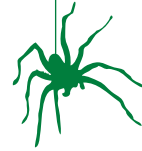
Teacher's name

Date





Certificate



This is to certify that



became a

scientist



in the Explore and Discover... Creepy crawlies challenge

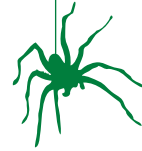
Teacher's name

Date





Certificate



This is to certify that



became a

professor



in the Explore and Discover... Creepy crawlies challenge

Teacher's name

Date

