



EarthLearn

Innovator & Campaigner Learning Activities

Championing solutions to improve invertebrate biodiversity and wellbeing, now and in the future

25. Worms with perms!

Requirements: drawing materials

7-11 years: teacher-led class activity and working individually, with plenary discussion

12-14 years: teacher-led class activity and working individually, with plenary discussion

Curriculum: Science (living organisms; biology; observation); Art (drawing; expression; anthropomorphism); English (oracy)

Time: 20 minutes

When minibeasts are drawn in books/ animated in films, they are often given human features - e.g. mouth/ eyes/ hair/ ears/ nose/ clothes. This is known as 'anthropomorphism' (making things look human). Do you think anthropomorphic images of worms help us feel close to them as humans, or further apart? Vote as a group.

Have a go at drawing a cartoon worm with a perm, sunglasses and a hat!

Now look at these close-up images of different types of invertebrates. They sense the world in very different ways to humans. What do you notice about their actual appearance? How are they different and why?





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Earthworm



Snail



Spider



Hoverfly



Beetle



Bee



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Teacher Notes

Earthworm: lack eyes, ears, and a nose, but they experience their underground world through specialized receptor cells spread across their skin. They feel touch, taste and smell chemicals, and detect shifts in light and ground vibrations to find food and avoid danger.

Hoverfly: exceptional vision, physical touch, airflow sensors, and internal gyroscopes for positioning and balance. Combine inputs fast to hover and dart quickly.

Snail: touch, smell, and chemical signals using four tentacles on their heads. They have poor vision through basic eyes at tip of upper tentacles, limited to light and shadow, cannot hear airborne sounds, and rely on specialized internal organs for balance and tracking trails.

Beetle: combination of compound eyes, sensitive antennae, specialized body hairs, and chemical receptors. These tools let them detect light, track chemical scents, feel physical vibrations, and even "hear" extreme environmental changes like forest fires

Spider: touch, air currents, and vibrations rather than sharp eyesight. They rely on microscopic hairs and specialized slit organs across their bodies to feel forces, sound waves, and movements in their surroundings

Bee: five eyes, highly sensitive antennae, and electrostatic charge. They see ultraviolet patterns on flowers, process motion five times faster than humans, and detect the electric fields of blossoms. They use their antennae to smell, taste, and feel their environment.