Solutions

Each answer shows the steps, then the **result**.

2.1

- Innate behavior is inherited/present from birth; learned behavior develops from experience

2.2

- Any one: reflex, web-spinning, sea turtle heading to the ocean

2.3

- Individuals with the helpful behavior survive and reproduce more, passing on the behavior

3.1 B

- innate

3.2

(a)

- Innate

(b)

- Reaching the ocean quickly avoids predators on land, so turtles that do it survive and reproduce more, favoring the behavior

3.3

- Innate is inherited and present from birth (e.g. a reflex); learned develops through experience (e.g. a dog trained to sit)

3.4

(a)

- the direction of light, and whether the tip is covered (the light condition)

(b)

- the **tip** detects light
- covering only the tip cut bending from 35° to 3°, about the same as the control (2°), although the rest of the shoot was still lit from one side

(c)

- bending toward light lets the leaves capture more light for photosynthesis, so the plant grows and reproduces more

(d)

- the dance communicates the direction and distance of the food, so other foragers find it quickly and the colony gathers more food with less energy spent searching