

Level 3

Suitable for:	young learners who have completed up to 150 hours of study in English
Type of English:	American
Headwords:	600
Key words:	15 (see pages 2 and 7 of these Teacher's Notes)
Subject words:	14 (see pages 2 and 8 of these Teacher's Notes)
Key grammar:	present simple, present continuous, <i>can</i> , adjectives

Summary of the Reader

This Level 3 title looks at the life cycles of butterflies and frogs; a popular CLIL (Content and Language Integrated Learning) subject area, covered by most schools as part of the science curriculum.

These animals undergo a dramatic metamorphosis from caterpillar to butterfly and from tadpole to frog, and they are common animals that children can see around them in their local environments. This makes them ideal subjects for study.

This Reader looks first at the butterfly life cycle in which there are four main stages: egg, caterpillar, chrysalis, and butterfly. Then it progresses to the frog life cycle which has also been divided into four main stages: egg, tadpole, tadpole with legs (froglet), and frog. For learners of English, the subject area may already be familiar in the students' first language and this will help in understanding the text. The text has been designed to recycle key language structures and vocabulary through the four stages of each life cycle.

Introducing the topic: *Life cycles*

Refer to the activities on pages 23 and 24 of the Reader and familiarize yourself with them beforehand. Before reading, do Activities 1 and 2 on page 23.

- **Activity 1, page 23:** Show the cover of the book and ask the students to tell you what they can see. Read out the title and ask for ideas about the subject of the book. This could take place in L1 if preferred.
- **Activity 2, page 23:** Introduce some key vocabulary by finding pictures that correspond to key words. Write the words on the board and work through the pronunciation, noting where the stress falls by underlining that part of each word.

Did you know ... ?

- Some butterflies can live for 12 months (for example, migrating Monarch butterflies).
- Some butterflies only live for a few days (for example, Small Blue butterflies).
- Red-eyed tree frogs are very small. The adult frogs are only 2–4 centimeters long.

Key words

(see page 7 of these Teacher's Notes for the Key words in context)

adult (n)	mate (n)
amazing (adj)	pattern (n)
breathe (v)	scientist (n)
bright (adj)	slide (v)
emerge (v)	stage (n)
drop (v)	stick (v)
lay (v)	study (v)
look like (v)	

Curriculum links

Natural science

Online video footage: Go online to watch video footage of the life cycle stages. Interesting websites include the following:

National Geographic Kids™

<http://video.nationalgeographic.com/video/player/kids/animals-pets-kids/bugs-kids/butterflies-kids.html>

This three-minute video has a wide variety of butterfly life cycle footage, although the commentary is aimed at native English speakers.

Teachers' Domain

<http://www.teachersdomain.org/resource/tdc02.sci.life.cyc.metamorph/>

This video of almost five minutes shows the life cycle of a frog, a dragonfly, and a butterfly.

After watching, have the students draw the life stages of one of the animals and display their work on the wall.

Remind the students that the Red-eyed tree frog is nocturnal. Discuss with students which other animals are nocturnal (*foxes, bats, owls, badgers, hedgehogs, mice*). They could choose an animal and find out about them: where they live, what they eat, where they sleep, any other interesting facts. They could each make a booklet displaying facts and pictures.

Subject words

(see page 8 of these Teacher's Notes for the Subject words in context)

back leg (n. phr)	life cycle (n)
caterpillar (n)	nocturnal (adj)
chrysalis (n)	pond (n)
froglet (n)	rainy season (n)
front leg (n. phr)	snake (n)
hibernate (v), hibernation (n)	tadpole (n)
insect (n)	wing (n)

Literacy

Poem with actions: Read the following poem with the class and then put actions to the words for everybody to join in. Explain the meaning of the words tadpole, pail (*a bucket*), wiggly (*moving from side to side with small quick movements*), sprout (*to grow*), and hop.

Tadpole, tadpole
Swimming in my pail
Big round head
And wiggly tail

Some day soon
Four legs will sprout
And then, small frog,
You'll hop right out!

Anonymous

Art and design

Students choose the Monarch butterfly or the Red-eyed tree frog from the Reader (or other kinds of butterflies or frogs) and draw and color it. Create a colorful display on the classroom wall.

Students could also make a display showing the life cycle of a frog. The pond could be made out of large paper plates covered in foil or painted blue / green. The frog and tadpoles at various stages could be modeled from air drying clay and the eggs made out of bubble wrap with black dots of paint in the middle. Vegetation could be made out of green tissue paper.

Geography

Remind the students that the Red-eyed tree frog lives in the rainforest. Use a map to talk about and name the different rainforests in the world. Get the students to work in groups and find out about other animals that live in the rainforest. Students could find out in which rainforest they live, what they eat, how they sleep, how they take care of their young. They could make posters with pictures and text, which can be displayed in the classroom.

Notes on the photocopiable activities**Page 14:** After-Reading activities, **Activity 4***Board game instructions*

- Put children into small groups no larger than four per group.
- Hand out one board game sheet per group and have them cut out the counters.
- Players place their counters on the START square.
- A coin is flipped and players take it in turns to move two spaces for heads and one space for tails.
- When players land on a square they must read out and answer the question. If they get it wrong they go back to START.
- The first player to land on the FINISH square is the winner.

Class Activities (After Reading)

Here are some activities to do with your class after reading *Butterflies and Frogs*.

1. Fact quiz

- Once the students have read the book, you can give them a fact quiz to check understanding of language and concepts.
- Place the students in pairs or groups. Read each section aloud to the class and ask the questions after the relevant pages have been read. The pair or group with the most correct answers wins. If available, have the teams press buzzers or ring bells to answer the questions.

Page 3

What does Hannah do? (*She's a scientist and she studies animals.*)

Where does the butterfly live? (*across Europe*)

Pages 4–5

What do the circles on the butterfly's wings look like to a mouse? (*a bird's head*)

How long can a Peacock butterfly live for? (*about 11 months*)

How can it live so long? (*It hibernates / sleeps during winter.*)

Pages 6–7

What do the eggs look like? (*They are small and green.*)

How long are the caterpillars in the eggs? (*about ten days*)

What do the hungry caterpillars eat? (*the leaves around them*)

Pages 8–9

Who can eat the caterpillars? (*birds*)

What happens in the third stage of the life cycle? (*The caterpillar grows a chrysalis around its body.*)

Why don't animals eat the chrysalis? (*Animals can't see the chrysalis because it looks like a leaf.*)

Pages 10–11

For how long is the caterpillar in the chrysalis? (*about two weeks*)

What comes out of the chrysalis when it opens? (*a butterfly*)

Why can't it fly? (*because its wings are wet*)

What does the butterfly do before it hibernates? (*It flies from flower to flower and eats a lot.*)

Pages 12–13

Where does the Red-eyed tree frog live? (*in the rainforests of Central and South America*)

What helps it to jump and climb? (*it's feet, because they can stick to the leaves*)

What color are its feet? (*orange / red*)

Pages 14–15

Why are the Red-eyed tree frog's colors important? (*it's green body looks like a leaf; it's red eyes can scare bigger animals*)

How do the eggs stay on the leaf? (*They stick on the leaf.*)

Pages 16–17

Which animals want to eat the eggs? (*snakes and big insects*)

What comes out of the eggs when they open? (*tadpoles*)

How do the tadpoles get into the water? (*They slide down the leaf and drop into the water below.*)

What do the tadpoles look like? (*They have tails and look more like fish than frogs.*)

Pages 18–19

How does the tadpole change its body in the third stage of the life cycle? (*It grows back legs and front legs, and the tails gets smaller.*)

What color is the froglet? (*brown*)

Pages 20–21

What makes it possible for the froglet to climb? (*Its front and back legs get stronger.*)

What does the frog eat? (*insects*)

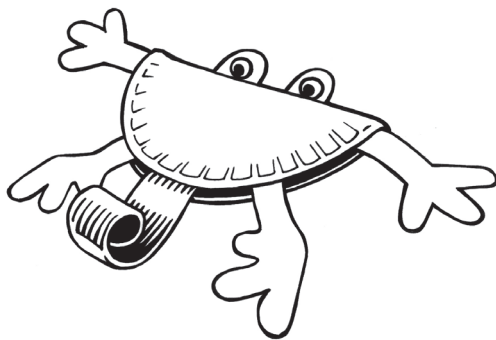
2. Paper plate frogs

Materials: paper plate; green and red paper; green paint; scissors; glue; glitter and craft eyes (optional)

- Before the session, make a paper plate frog as an example for the students.

- Paint a paper plate front and back with green paint. Add some gold glitter to the paint for a slimy effect. Once dry, fold the plate in half.
- Draw an outline of four frog's legs and two big bulging eyes on green construction paper and a long tongue on red paper. Then cut them out. Stick the legs and the tongue to the folded inside of the plate. Stick the bulgy eyes to the top of the plate where it has been folded at the top. Stick on googly craft eyes (if available) or cut out and stick on little round circles of white paper and add black dots. When the plate is opened a little and closed, it looks like the frog's mouth.
- Write a fact about frogs on a piece of white paper and stick the paper inside the frog.

Example facts: A frog doesn't close its eyes when it sleeps. A frog can breathe through its skin.



- Give out all the materials to the students. Show your students your paper plate frog and explain to them how to make it.
- Ask the students to find out something about frogs to write and stick inside their frog. They could do this for homework. They can find out, for example, how frogs breathe, how they sleep, how they eat, how they see, where they live, etc.
- Display the frogs in the classroom.

3. I am a tadpole / caterpillar

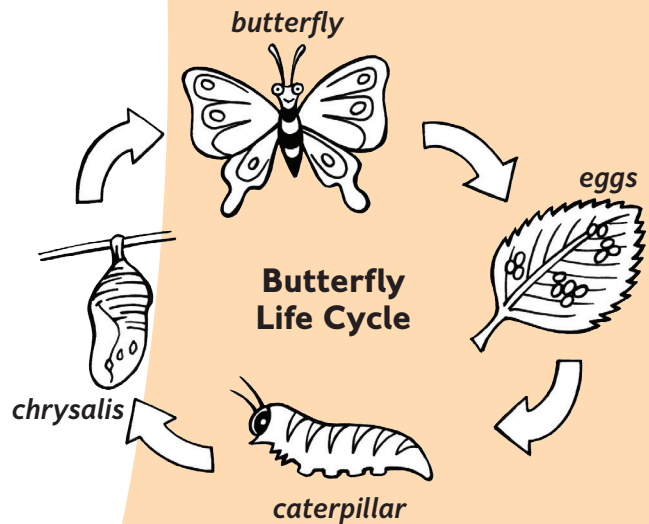
- Have students imagine themselves from the perspective of a tadpole or a caterpillar and write a story called *I am a tadpole* or *I am a caterpillar*. Write the following structures on the board for students to use:

*I'm a ...
I've got ...
I can ...
I live / sleep / eat ...
In the first / second / third stage of my life ...*

4. Butterfly life cycle collage

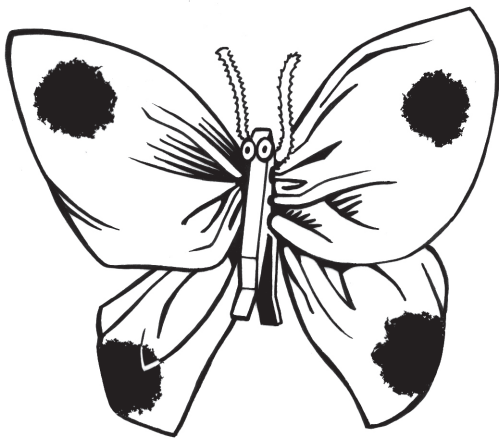
Materials: Large pieces of white construction paper (one for each student); pens; glue. For the butterfly: pieces of paper towel (or coffee filters, if available); clothes pegs; pipe cleaners; paint in a variety of bright colors; sequins (optional). For the butterfly eggs: cotton balls; leaves or green construction paper; scissors. For the caterpillars: cardboard egg boxes; paint; pipe cleaners; wool or string (optional); leaves. For the chrysalis: cotton balls; twigs.

- Talk with the students about the stages of the life cycle of a butterfly. Encourage the students to refer to pages 6–11 of the book. Elicit what happens at each stage of the lifecycle. As you do this, draw a simple diagram with arrows showing the life cycle of a butterfly on the whiteboard.



- Explain to the students that they are going to make a butterfly life cycle collage. Give each student the construction paper and the other materials. The students will make a butterfly, some eggs on a leaf, a caterpillar and a chrysalis, and then stick them on the paper to show the butterfly life cycle.

- To make the butterfly, students pinch the paper towel (or coffee filter) in the middle and place the clothes peg in the center. The clothes peg looks like the body of the butterfly and the paper towel looks like wings. The students paint the “wings”. The paint is absorbed and spreads through the paper. The antennae is made with the pipe cleaner, bent into shape and held in place by the clothes peg. The butterfly can be decorated with sequins.



(Alternatively, colorful butterflies can be made by dipping hands in paint and making handprints on paper for the butterfly wings. The butterflies can be decorated and cut out.)

- To make the eggs, the students take very small pieces from the cotton balls and roll them up into balls the size of a fingernail. The students stick these onto a leaf collected from outside. Or, they could cut a leaf shape out of green construction paper.
- To make the caterpillar, a row of egg cup sections are cut out of a cardboard egg box, to make the body and head of the caterpillar. (If single egg cup sections are cut out, they can be threaded together with string or wool.) This can be painted and decorated. The students draw or stick two eyes on the front and push a pipe cleaner through the front section above the eyes to make the antennae. The caterpillar can be placed on a leaf.
- To make the chrysalis, the students take a cotton ball, roll it in their hands and shape it

into oval shape. The “chrysalis” can then be attached to a twig with glue.

- Get the students to arrange the butterfly, eggs, caterpillar, and chrysalis on their paper in a large circle and glue them in place. They should draw arrows between each part of the life cycle and write a summary of each stage of the life cycle (as on the whiteboard). Remind them to write the title.
- Ask volunteer students to show their collage to the class and explain parts of the life cycle. The collages can be displayed in the classroom.

Key words

- adult**.....Slowly this small froglet changes from brown to the bright colors of the adult frog. (p. 20)
- amazing**.....I want to show you two animals with amazing life cycles. (p. 3)
- breathe**It doesn't breathe under water now. (p. 19)
- bright**It has a bright green body. (p. 13)
- emerge**.....In the spring, the Peacock butterfly emerges from hibernation. (p. 6)
- drop**The tadpoles slide down the leaf and drop into the water below. (p. 17)
- lay**Then, it finds a leaf above a pond and lays its eggs. (p. 15)
- look like**.....The circles look like eyes. (p. 4)
- mate**First, the butterfly finds a mate. (p. 6)
- pattern**The pattern on its wings is beautiful, but it's also important. (p. 4)
- scientist**My name is Hannah, and I'm a scientist. (p. 3)
- slide**The tadpoles slide down the leaf and drop into the water below. (p. 17)
- stage**This is the first stage of its life cycle. (p. 6)
- stick**.....Its feet can stick to the leaves. (p. 13)
- study**I study animals. (p. 3)

Subject words

- back leg** First, it grows back legs. (p. 18)
- caterpillar** The caterpillars are hungry, and they eat the leaves around them. (p. 7)
- chrysalis** It grows a chrysalis around its body. (p. 9)
- froglet** A froglet is a very young frog. (p. 19)
- front leg** Then, it grows front legs. (p. 18)
- hibernate /** It finds a tree, and it hibernates through the cold winter months. (p. 5)
- hibernation**
- insect** The tadpoles live in the water, and they eat very small insects. (p. 17)
- life cycle** This is the second stage of the life cycle. (p. 7)
- nocturnal** The Red-eyed tree frog is nocturnal. (p. 13)
- pond** Then, it finds a leaf above a pond and lays its eggs. (p. 15)
- rainy season** In the rainy season, the frog finds a mate. (p. 15)
- snake** Snakes and big insects want to eat the eggs. (p. 16)
- tadpole** The tadpole is growing and changing. (p. 18)
- wing** It can't fly because its wings are wet. (p. 10)

While-Reading activities

Activity 1 (pages 3–7)

Write *T* (True) or *F* (False).

- 1 The Peacock butterfly lives across Africa. ☐
- 2 The circles on a Peacock butterfly's wings look like "eyes". ☐
- 3 The Peacock butterfly can live for 13 months. ☐
- 4 It hibernates in the summer months. ☐
- 5 It finds a mate in spring. ☐
- 6 It lays its small green eggs inside a flower. ☐
- 7 Black caterpillars come out of the eggs after about fifteen days. ☐

Activity 2 (pages 8–11)

Order the sentences.

- 1 A butterfly emerges from the chrysalis. ☐
- 2 A chrysalis grows around the caterpillar's body. ☐
- 3 The butterfly hibernates in the autumn. ☐
- 4 Caterpillars grow bigger and birds sometimes eat them. ☐
- 5 The butterfly eats a lot in the summer. ☐
- 6 The caterpillar changes into a butterfly inside the chrysalis. ☐
- 7 The butterfly can't fly because its wings are wet. ☐

Activity 3 (pages 12–15)

Write the words in the sentences.

scare rainy rain forest stage stick nocturnal

- 1 The Red-eyed tree frog lives in the _____.
- 2 It is _____ and it sleeps on a green leaf.
- 3 The tree frog's feet can _____ to leaves.
- 4 The tree frog's red eyes can _____ bigger animals in the forest.
- 5 It finds a mate in the _____ season.
- 6 In the first _____ of the tree frog's life cycle, it lays eggs on a leaf.

Activity 4 (pages 16–18)

Order the words in the sentences.

- 1 frog's / eat / Snakes / eggs. / many

- 2 eggs. / emerge / Tadpoles / the / from

- 3 look / fish. / like / tadpoles / The

- 4 the / live / water. / The tadpoles / in

- 5 grows / First, the / back / tadpole / legs.

- 6 tadpole's tail / smaller / The / gets / and / smaller.

Activity 5 (pages 19–22)

Match the two parts of the sentences.

- | | |
|---|---------------------------------------|
| 1 The tadpole changes | a from brown to bright colors. |
| 2 The froglet breathes | b small insects. |
| 3 The froglet's legs get | c in the life cycle of a frog. |
| 4 The froglet's color changes | d out of the water. |
| 5 The Red-eyed tree frog catches | e stronger and it can climb. |
| 6 There are four stages | f to a small froglet. |

After-Reading activities

Activity 1

Find fifteen words from the story.

stagedangeroushibernatenocturnalslidesseasonemergeclimb breatheforestmatepatternadultchange fourth

Activity 2

Write the correct words under the sentences.

1 It hibernates in the winter months.

.....

2 They slide down the leaf and drop in the water.

.....

3 They eat the leaves around them.

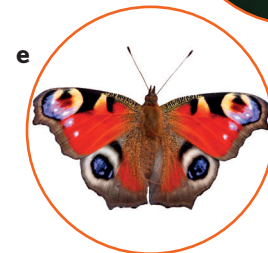
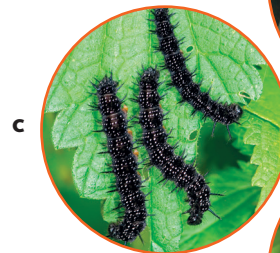
.....

4 It looks like a leaf.

.....

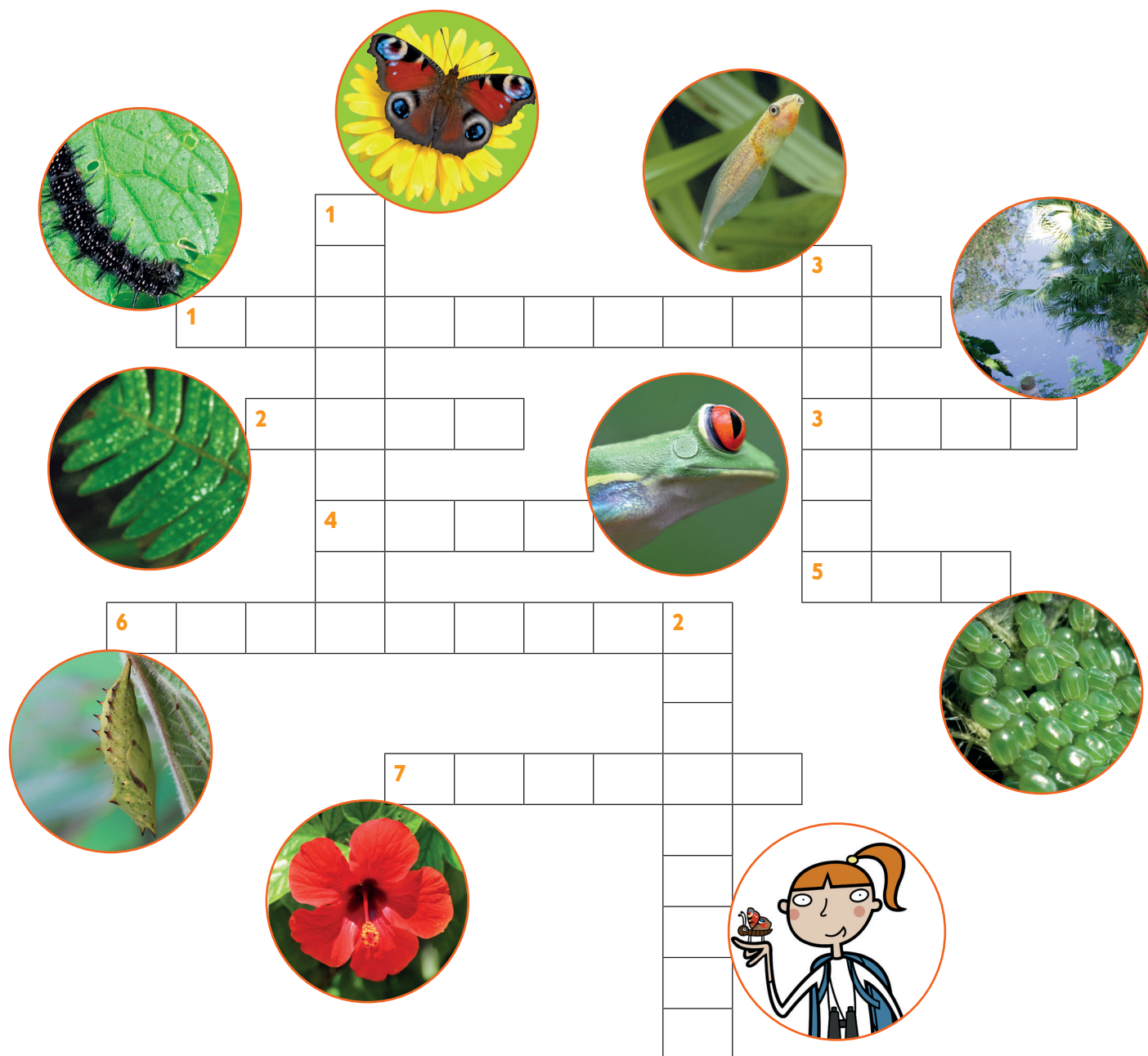
5 It moves from the water to the plants around the water.

.....



Activity 3

Look at the pictures and write the words in the crossword.



The crossword puzzle grid is as follows:

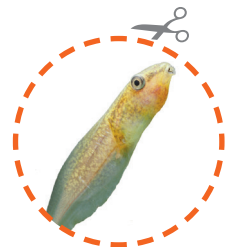
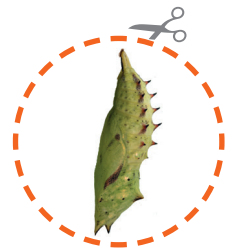
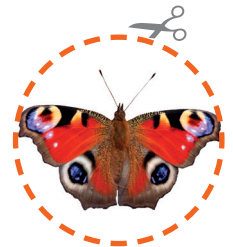
- 1 Across: 10 squares
- 1 Down: 2 squares
- 2 Across: 4 squares
- 2 Down: 3 squares
- 3 Across: 4 squares
- 3 Down: 5 squares
- 4 Across: 4 squares
- 4 Down: 2 squares
- 5 Across: 3 squares
- 5 Down: 2 squares
- 6 Across: 8 squares
- 6 Down: 2 squares
- 7 Across: 5 squares
- 7 Down: 6 squares

Activity 4

Play the board game in groups of four.

- Take a counter and place it on the START square.
- Flip a coin. Take it in turns to move your counter two spaces for heads and one space for tails.
- When you land on a square, read out and answer the question. If you get it wrong go back to START.
- The first player to land on the FINISH square is the winner.

12 Does a tadpole's tail get bigger and bigger?	FINISH	
11 Go back to square 7! 	10 How does a butterfly move around?	9 Can a tadpole breathe under the water?
6 Go back to the start! 	7 What does a tadpole eat?	8 What comes out of a chrysalis?
5 What does a caterpillar eat?	4 What comes out of a frog's egg?	3 What comes out of a butterfly's egg?
START	1 Where does a butterfly lay her eggs?	2 What are the four stages of a frog's life cycle?



Answer Key

In the back of the Reader

Before You Read

- 1 A butterfly on a flower and a frog on a twig.
- 2 **a** caterpillar, pp. 7, 8, 9
b chrysalis, pp. 9, 10
c tadpole, p. 17
d insect, pp. 16, 21
e froglet, pp. 18, 20

After You Read

- 1 **a** Yes **b** Yes **c** No **d** No **e** Yes
- 2 Stage 1 = b
 Stage 2 = d
 Stage 3 = a
 Stage 4 = c
- 3 Stage 1 = c
 Stage 2 = d
 Stage 3 = a
 Stage 4 = b

In these Teacher's Notes

While-Reading activities

Activity 1

1 F 2 T 3 F 4 F 5 T 6 F 7 F

Activity 2

The correct order is: 4, 2, 6, 1, 7, 5, 3

Activity 3

1 rain forest 2 nocturnal 3 stick 4 scare
 5 rainy 6 stage

Activity 4

- 1 Snakes eat many frog eggs.
- 2 Tadpoles emerge from the eggs.
- 3 The tadpoles look like fish.
- 4 The tadpoles live in the water.
- 5 First, the tadpole grows back legs.
- 6 The tadpole's tail gets smaller and smaller.

Activity 5

1 f 2 d 3 e 4 a 5 b 6 c

After-Reading activities

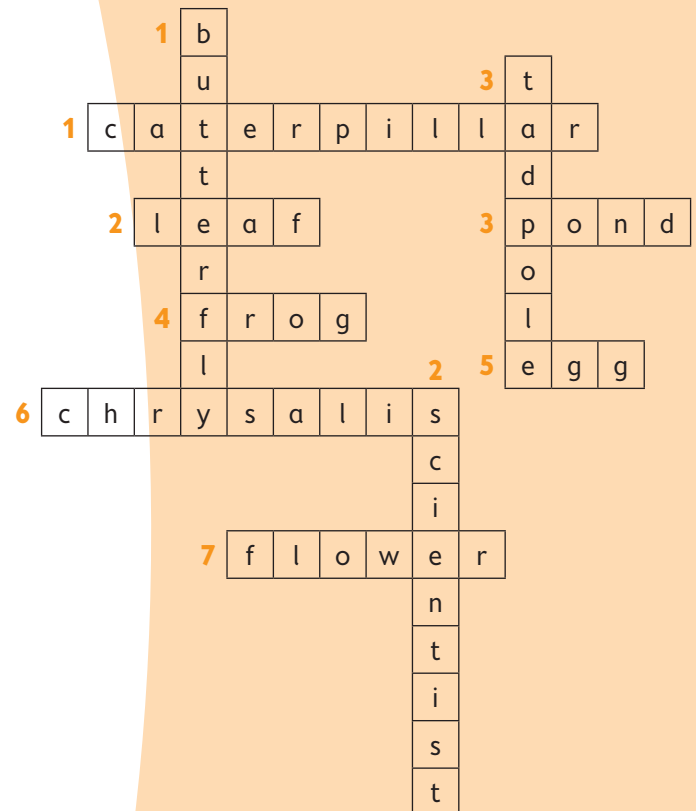
Activity 1

stage dangerous hibernate nocturnal slide season
 emerge climb breathe forest mate pattern adult
 change fourth

Activity 2

1 **e** butterfly 2 **b** tadpoles 3 **c** caterpillars
 4 **a** frog 5 **d** froglet

Activity 3



Activity 4

- 1 on a leaf / some leaves
- 2 Four stages: egg, tadpole, froglet, frog
- 3 a caterpillar
- 4 a tadpole
- 5 leaves
- 6 –
- 7 small insects
- 8 a butterfly
- 9 Yes, it can.
- 10 It flies.
- 11 –
- 12 No, it gets smaller and smaller.