

Queen Alexandra's Birdwing

Western Pygmy Blue

Sensitive antennae enable butterflies to smell, hear and feel things.

Compound eyes are made up of hundreds, or sometimes thousands of tiny lenses. To butterflies, all flowers appear in shades of blue.

The yellow body of the Queen Alexandra's Birdwing butterfly warns its predators that it is poisonous.

Butterfly wings are covered in tiny overlapping scales. The forewings are always larger than the hindwings.

Comparison of the world's largest and smallest butterfly.

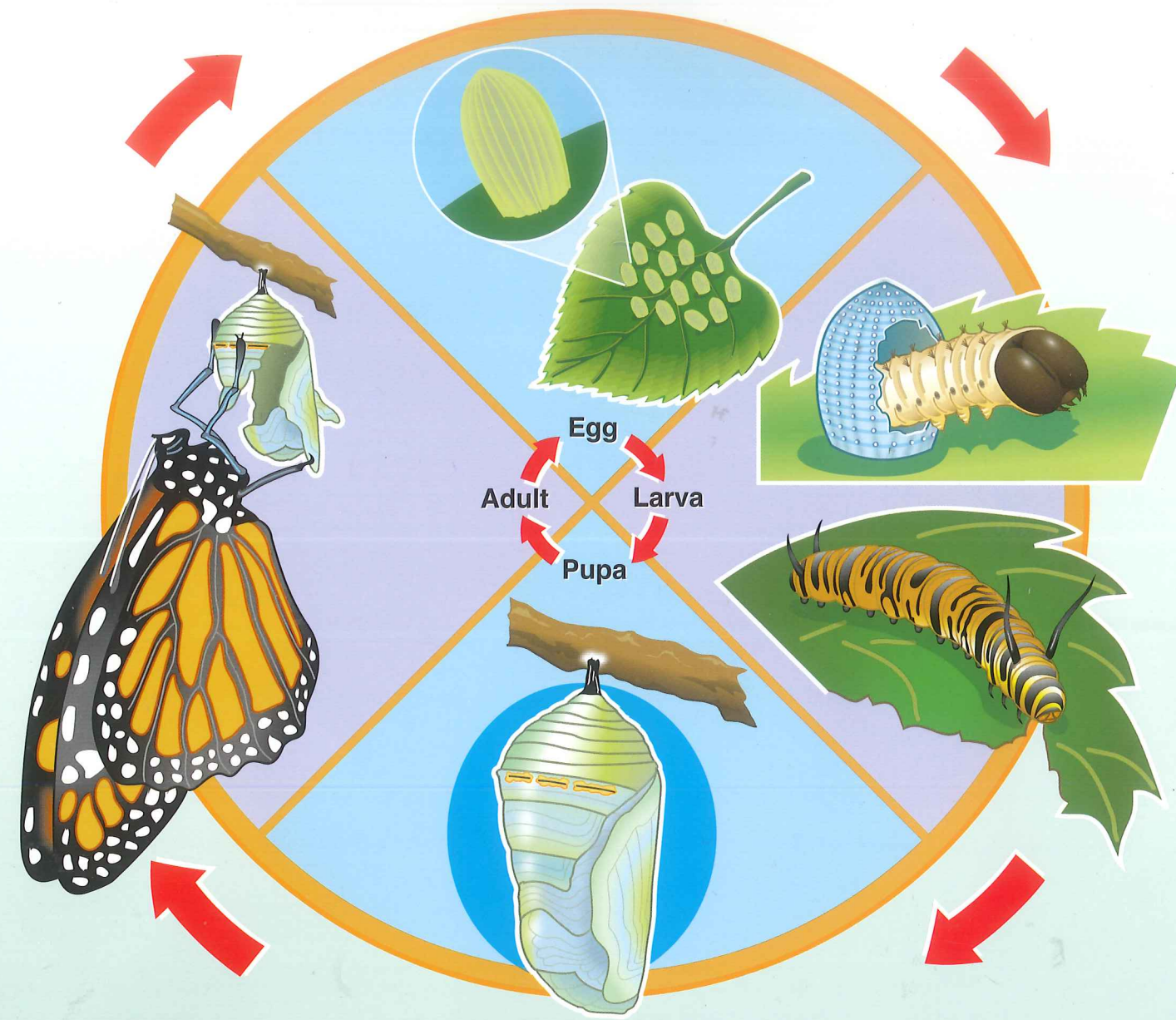
Lifecycle of a butterfly

1 Butterflies are beautiful creatures that belong to the insect family.

Butterflies carry pollen from flower to flower. This important job helps plants reproduce.

Butterflies can be found all over the world.

There are tens of thousands of butterfly species. The smallest butterfly is the **Western Pygmy Blue** of North America, which has a wingspan of only one centimetre. The largest butterfly is the **Queen Alexandra's Birdwing** found in Papua New Guinea. It has a wingspan of twenty-eight centimetres.



2 It is amazing to think that butterflies used to be caterpillars. Butterflies are *metamorphic*, which means they change shape during their life. The life cycle of a butterfly is one of the most interesting in the animal kingdom.

Every butterfly goes through four major stages in its life cycle. These are the **egg**, the **larva**, the **pupa** and the **adult**.

3 **Egg Stage:** The egg is usually laid on a plant that will serve as food for the caterpillar. The egg is often greenish in colour. After a few days the caterpillar begins to form. When the caterpillar grows large enough, it breaks out of its shell.

4 **Larva Stage:** The caterpillar eats and grows much larger. It eats its own shell first, then

lots of leaves. It has a large head with strong jaws and eleven other parts called segments. The first three segments form the **thorax**. The next eight segments are the caterpillar's **abdomen**. Each segment has short legs attached to it. The caterpillar will shed its skin a number of times as it grows. With each shedding the caterpillar can change its colour and markings. Caterpillars keep on eating and growing for about a month.

- 5 **Pupa Stage:** The caterpillar fixes a pad of silk to a plant stem and grips it with its back legs. The silk comes from a place near the caterpillar's mouth. After a few days the outer layer of skin forms a hard case called

a **chrysalis**. Some other caterpillars weave a silk cocoon.

- 6 Inside the chrysalis, or cocoon, the pupa changes into a butterfly. The insect's body is rebuilt into a completely new form. This is called **metamorphosis**. This can take just three weeks. Some butterflies though, take all winter.

Adult Stage: A liquid from the butterfly softens the shell so it can escape. The soft, damp butterfly then hangs with its wings pointing down. The butterfly will pump blood and air to its wings and body by tightening muscles. After about thirty minutes the butterfly is ready to fly and greet the world.

Questions

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| <p>1 What important duty do butterflies perform?</p> <p>a They look beautiful. b They have four stages in their life cycle. c They carry pollen from flower to flower.</p> <p>2 The order of the stages in a butterfly's life cycle is</p> <p>a egg, pupa, larva, butterfly. b egg, larva, pupa, butterfly. c larva, egg, pupa, butterfly.</p> <p>3 The egg is laid on a plant</p> <p>a because it is soft. b so it can be fertilized. c so the larva can have food.</p> | <p>4 The last eight segments of a caterpillar are its</p> <p>a stomach. b body. c abdomen.</p> <p>5 The pupa turns</p> <p>a into an egg. b into a butterfly. c into a caterpillar.</p> <p>6 A butterfly hangs with its wings in a downward direction</p> <p>a so they can dry out and receive blood and oxygen. b so it can rest before flying. c so it can break its shell open.</p> |
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Vocabulary

Match the words from the text to the clues. The brackets show the text sections ().

winter liquid
caterpillar pollen species

- 7 Fine dust made by flowers (1)
8 A group or variety of animals (1)
9 A stage of development (3)
10 A season (6)
11 A smooth, watery substance (6)

Grammar

Find an **adjective** (a word to describe a noun) in these sentences from the text.

- 12 Butterflies are beautiful creatures.
13 The damp butterfly then hangs down.
14 This important job helps plants reproduce.
15 A butterfly goes through four stages.

Back To The Text...

- 16 The writer believes that butterflies are important to the environment.
- a true b false
- 17 In which part of the library would you find this text?
- a fiction b non-fiction
- 18 The purpose of this text is
- a to persuade us to save butterflies.
b to explain the lifecycle of a butterfly.

Think About This

- 19 What colour is used to show the Queen Alexandra's Birdwing in the comparison diagram?
a blue b green c pink
- 20 Where does the image of the Western Pygmy Blue appear?
a below the Queen Alexandra's Birdwing
b to the right of the Queen Alexandra's Birdwing
c to the left of the Queen Alexandra's Birdwing
- 21 How has the illustrator created the B in the title?
a by using a butterfly on a stick
b by using a caterpillar on a stick
- 22 The chrysalis is part of
- a the larva stage.
b the egg stage.
c the pupa stage.
- 23 How do we learn that the Queen Alexandras's Birdwing is poisonous?
a from the clever title
b from the text in paragraph one
c from a caption on the first illustration

Challenge Option

Drawing: Draw a picture of a colourful butterfly.

