

Comparing and contrasting
the life cycle of mammals,
amphibians, insects and birds

LEARN AT **CHESTER ZOO**

What is a life cycle?



- **Can you explain the human life cycle? How do humans change in life?**



OLDER PERSON

- Last stage of a human life.
- Physical attributes start to decline more rapidly.
- Hair turns white or grey. Death occurs at about 81 years.



ADULT

- Starts at about 20 years old and lasts until about 65 years old.
- Adults are fully mature humans, with usually stronger muscles and senses than other stages of development.
- Adults often reproduce. At the age of about 40 some qualities start to decline.



FOETUS

The sperm from the father fertilises the egg from the mother. At first the foetus is a bundle of cells, but this grows and starts to look like a very small person.



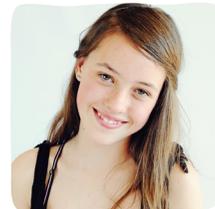
BABY

- After 9 months of developing in the mother's womb, the baby is born.



CHILD

- Children learn to walk and talk.
- They start to communicate better and form friendships.
- They learn and develop physically and academically.



ADOLESCENT

- Starts around the age of 13.
- Stage in development when a child starts to develop into an adult. Body changes occur; these changes are known as puberty.

The human life cycle

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds

Success Criteria:

For the life cycles of mammals, amphibians, insects and birds, I can:

- Name major stages within specific groups.
- State major similarities and differences between specific groups.
- Give details related to specific animals.
- Explain differences between animals within the same group.

Can you create a life cycle

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds

- There are different sets of cards that can be used to create separate life cycles of a specific mammal, an amphibian, or a bird. (The general life cycle of all of these groups and also insects will be looked at later in the lesson).
- There are sets of cards for UK animals and South-east Asian animals as shown below:

UK ANIMAL	SOUTH EAST ASIAN ANIMAL
Mammal - Cat	Mammal - Orangutan
Amphibian - Frog	Amphibian - Flying frog
Bird - Robin	Bird - Borneo Hornbill

- In 2s or 3s, you will be given a few minutes to try to create both life cycles within a specific animal group e.g. mammals, using the relevant sets of cards.
- Use blu-tac to stick the cards to background card/ paper to be able to feedback information to the rest of the class.
- What is similar about both life cycles? Discuss together obvious similarities and record on white boards. If time allows, record the main differences.

Review the life cycles created

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds

- Review the same life cycles created by different groups of children.
- Your teacher will help you to review any errors or misconceptions.
- You should review the life cycles in the following order:

- Mammals
- Amphibians
- Birds

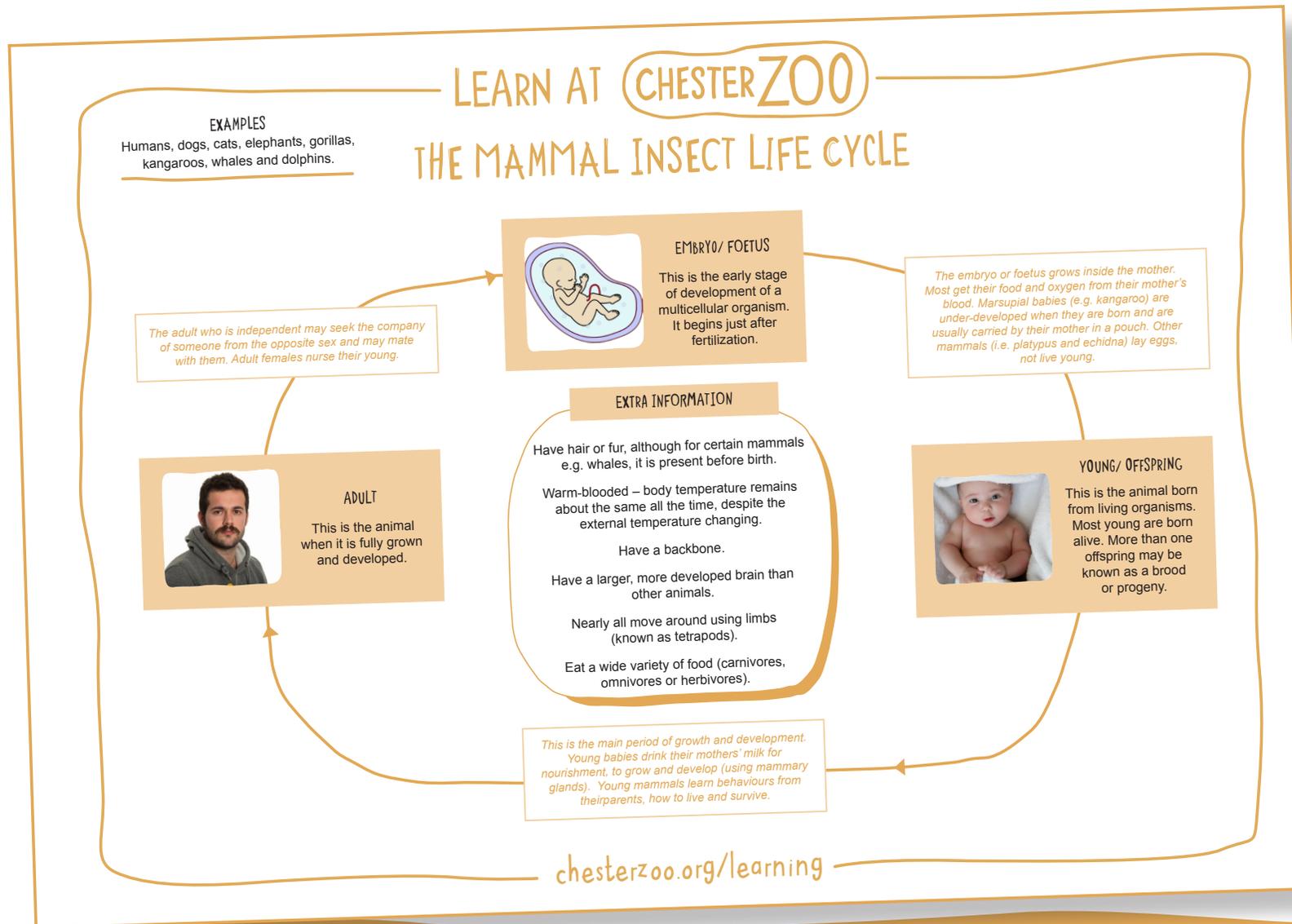
What is similar about both life cycles in the same animal group?

On the following slides are the life cycles showing the main stages within each group mentioned above. The general life cycles of insects are also shown:

- Insects with incomplete metamorphosis
- Insects with full metamorphosis

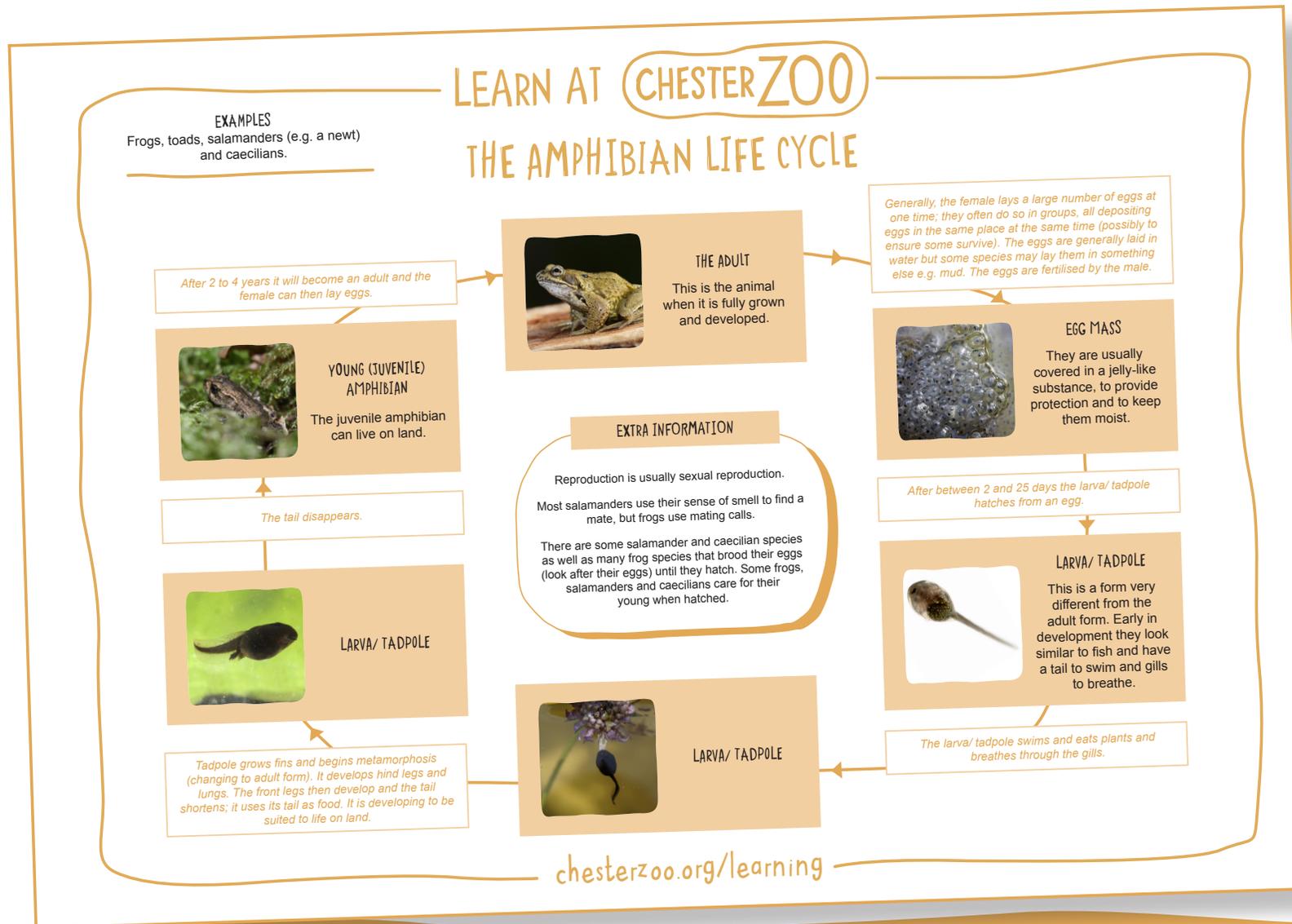
Life cycle of a mammal

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds



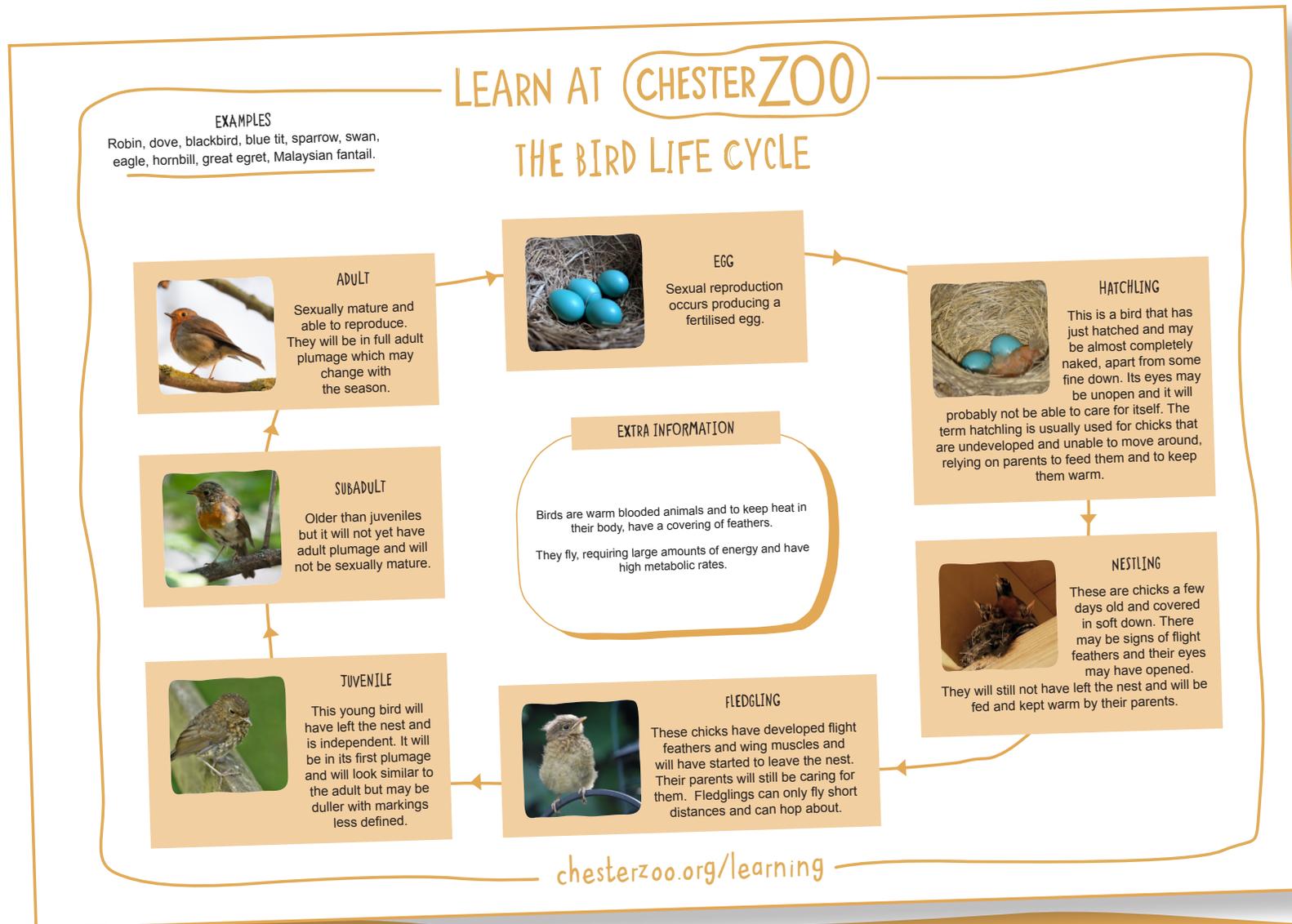
Life cycle of an amphibian

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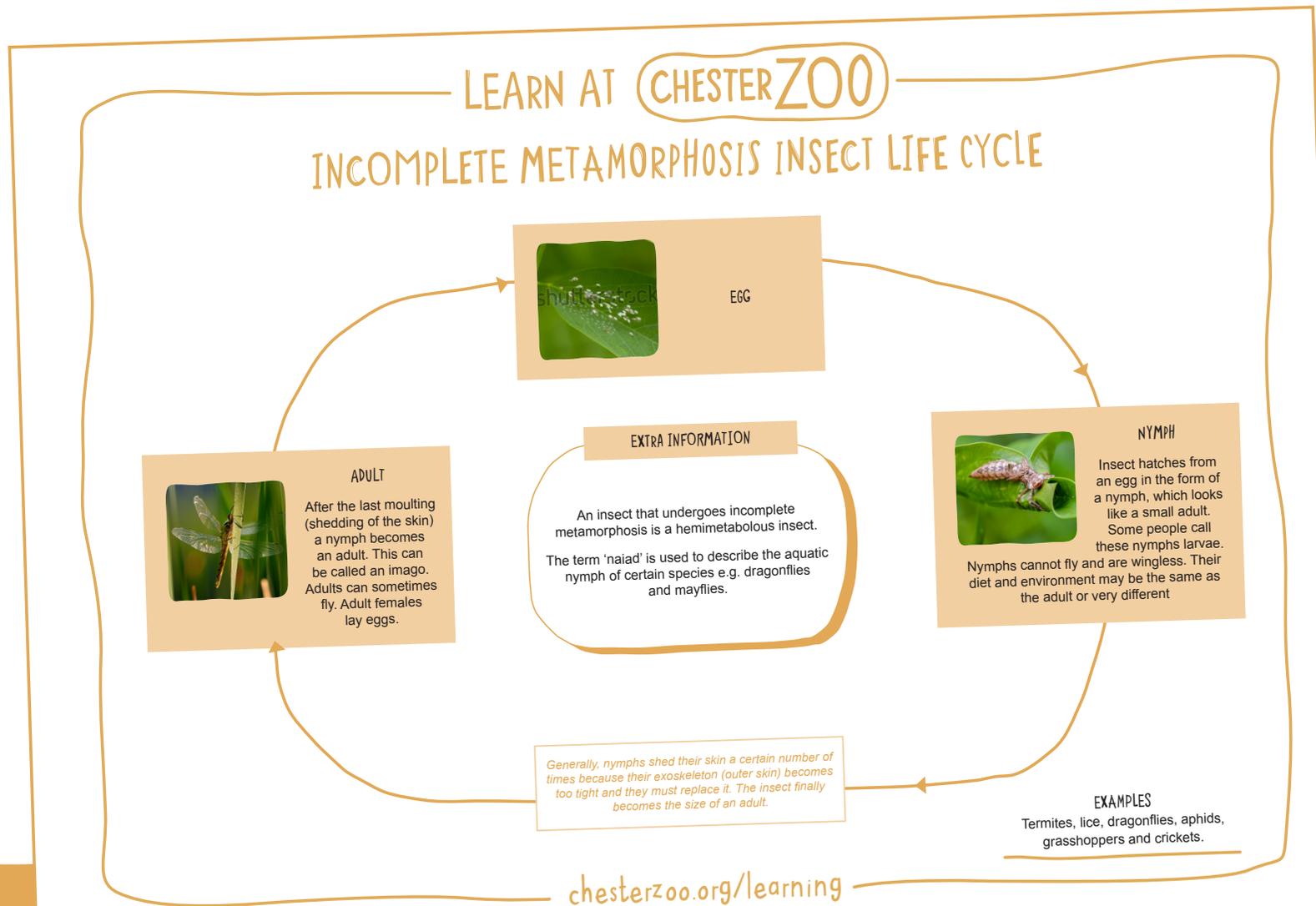
Life cycle of a bird

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds



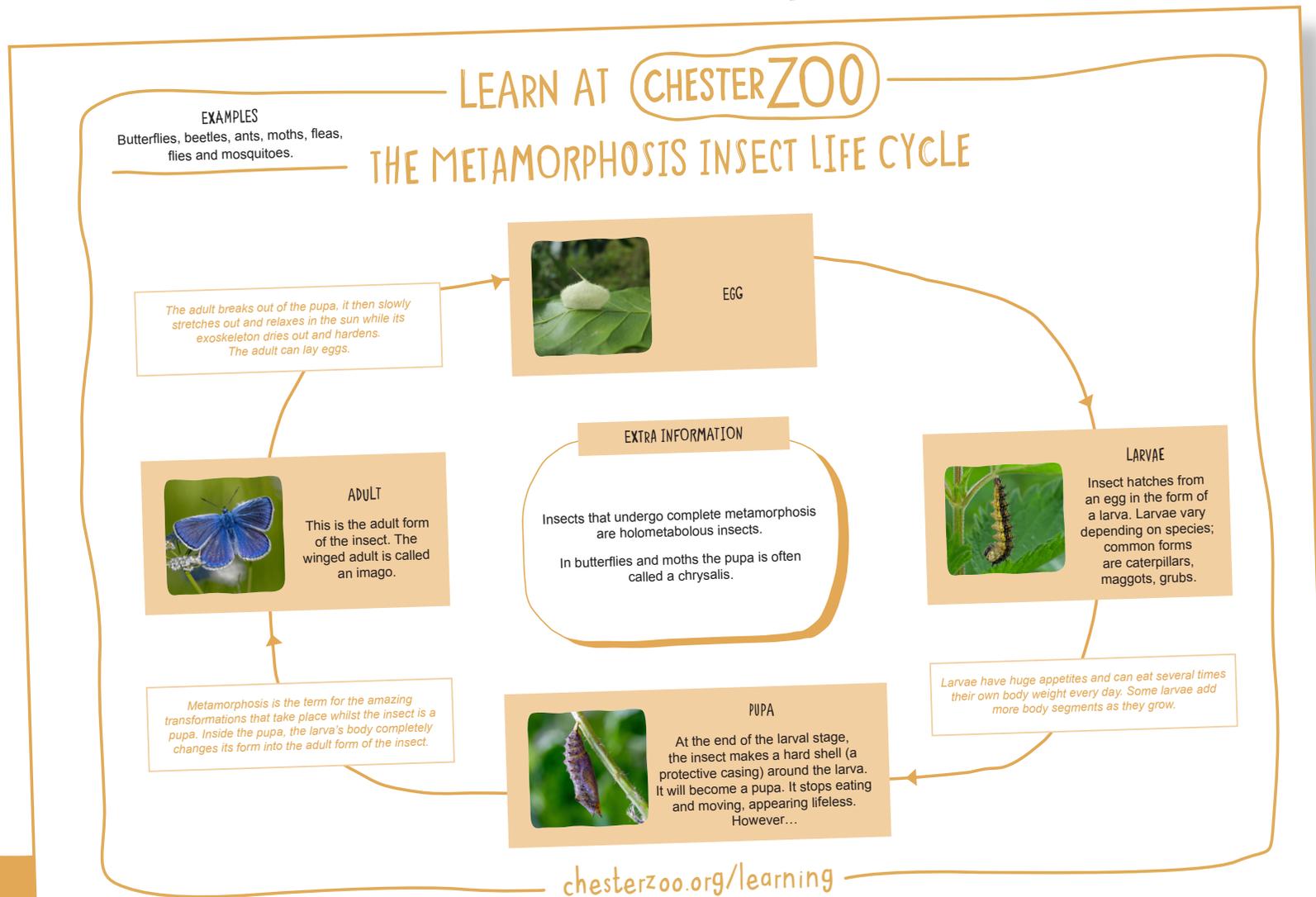
Life cycle of an insect showing incomplete metamorphosis

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds



Life cycle of an insect showing complete metamorphosis

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds



What are major similarities & differences between mammals, amphibians, birds and insects?

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds

- Use the Chester Zoo Life Cycle Posters of the groups mammals, amphibians and birds and two types of insect life cycles for the following activity.
- Compare and contrast the main differences between the above groups, using the following worksheet: 'Compare and contrast life cycles'.

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L.O.: To compare and contrast the life cycle of mammals, amphibians, birds and insects.

WHAT ARE THE MAIN DIFFERENCES BETWEEN THE LIFE CYCLES OF MAMMALS, AMPHIBIANS, BIRDS & INSECTS

Name: _____ Date: _____ Class: _____

Generally answer with 'Yes' or 'No'. If this is not possible, give a brief answer.

GROUP	EXAMPLE ANIMAL	ARE THE YOUNG BORN ALIVE?	DOES THE ADULT LOOK AFTER ITS YOUNG?	DOES THE ANIMAL CHANGE ITS APPEARANCE DURING ITS LIFE?

- Your teacher will explain how you will be completing the worksheet and model how this is done.

What have you achieved?

L.O.: To compare and contrast the life cycle of mammals, amphibians, insects and birds

Plenary

Success Criteria:

For the life cycles of mammals, amphibians, insects and birds, I can:

- Name major stages within specific groups.
- State major similarities and differences between specific groups.
- Give details related to specific animals.
- Explain differences between animals within the same group.

- Review the completion of the worksheet: 'Compare and contrast life cycles'.
- Review the learning objective and success criteria.

EXTRA tasks related
to life cycles...

You will be given specific
task sheets for your specific
working groups, shown on
the following slides...



*Creating a life cycle for a specific animal

- Use the general life cycle sheet for a specific group e.g. mammal.
- Write a life cycle for an animal that you know well e.g. a specific bird or dog.
- Annotate it as well as you can, using your own knowledge or information from e.g. internet.

** Comparing and contrasting the life cycle of animals from the same group

** Use the relevant Chester Zoo general life cycles of mammals, amphibians, birds and insects and other secondary resources (e.g. books or the internet) to **compare specific animals within the same group** of the Animal Kingdom.

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COMPARING TWO DIFFERENT ANIMALS WITHIN THE SAME ANIMAL GROUP

Name: _____ Date: _____ Class: _____

Use the Chester Zoo life cycle posters and other secondary resources to compare specific animals found in the same group of the Animal Kingdom. You are to compare an animal from the UK with an animal from another country in the world. Write down the similarities and differences in the table below. (Use a separate piece of paper, if necessary). Choose animals from the following groups: mammals, amphibians, birds and insects. Write the animals you have chosen below.

SIMILARITIES	DIFFERENCES

- Include your information in the worksheet: 'Comparing two different animals within the same animal group.'

You should compare a UK animal with one in the rainforest e.g. Borneo in South-east Asia.

*** Comparing and contrasting the life cycle of animals from the same group

*** Draw out two different life cycles for a UK animal and an animal from the rainforest (e.g. in Borneo) within the same group of the Animal Kingdom. **Annotate to show the similarities and differences.** (To make this easier, the life cycles could be drawn vertically, next to each other).

Include information to answer these questions:

- What is the difference between the animal life spans?
- Are the animals endangered?
- What is the gestation period? (How long are the animals developing in the womb, egg etc.)