

Butterfly lifecycle

a Sensory Trust outdoor exploration activity



Explore the lifecycle of a butterfly using sensory experiences and kinaesthetic learning.



Aim

To understand there are different stages in the life of a butterfly.



Time

1 hour.



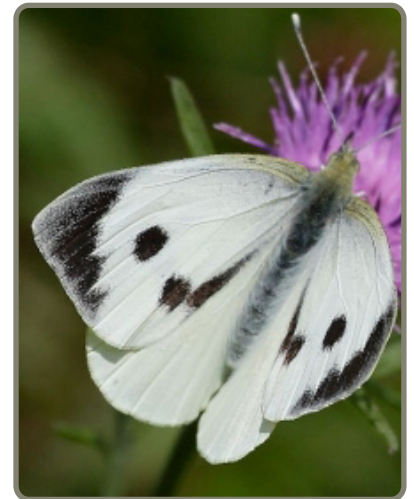
Number

Can be done individually or in small groups.



KS

All ages.



What you will need

- * Butterfly Lifecycle Kit - introduction.
- * 8 prompt instruction cards, fingerprint worksheets (available to print).
- * Floaty material such as a chiffon scarf.
- * Yellow hook and loop dots.
- * Green felt in the shape of a leaf.
- * Mustard.
- * Clay.
- * Balls of wool.
- * Rulers.
- * Ink pad.



Learning outcomes

- * Exploring touch, sight, smell, proprioception and vestibular senses through the lifecycle of a butterfly.
- * Exploring science with a sense of excitement, understanding of natural phenomena, observation and hearing and/or using scientific vocabulary of the natural world.
- * Creation of nature based art.
- * Maths: measuring.



Prep

Lay out your lifecycle in order, print and prepare the fingerprint worksheets.

Print and cut out the prompt instruction cards.

Make up the mustard smell into a smell pot.



Why

A sensory experience whilst learning appeals to all individuals and communicates meaning which can create more connections in the brain. It is especially important for young people who do not necessarily communicate with language to share in the learning. For those who do use verbal communication the sensory experiences support language development and cognitive growth which leads to the ability to complete more complex learning tasks.



Expanding the activity

- * Search for butterflies or moths on a walk or sitting still to see if any fly by. This is more likely to happen in the spring and summer months during the warmest, sunniest time of day, from mid-morning to late afternoon. You can mash up some banana on a plate to attract them. Don't forget the suncream!



Levels of engagement



Sensory

- * Work your way through Cards 1 – 8, following the instructions on the cards.
- * Finish the activity with a one star summary fingerprint butterfly lifecycle following the TEACCH style instructions.



Semi-formal

- * Work your way through Cards 1 – 8, following the instructions on the cards.
- * Finish the activity with a two star summary fingerprint butterfly lifecycle following the TEACCH style instructions if necessary.
- * Encourage use of the key words in the lifecycle.



Formal

- * Work your way through Cards 1 – 8, following the instructions on the cards.
- * Finish the activity with a three star summary fingerprint butterfly lifecycle.
- * Encourage labelling each of the stages of the lifecycle with the correct words.
- * See how many of the questions on the three star worksheet can be answered.

Sensory Trust promotes and supports the creation and management of outdoor spaces that can be used and enjoyed by everyone, regardless of age or ability.

www.sensorytrust.org.uk tel: +44 (0)1726 222900 enquiries@sensorytrust.org.uk

Produced through the Growing among Trees Project in partnership with:

Lifecycle of a Butterfly (Cabbage or Great White Butterfly)



The Eggs



**Larva
Caterpillar**



**Chrysalis
The cocooned
pupa**



The Butterfly

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Card 1

You will need: Flexible material to represent a butterfly.

What to do: Encourage students to move their arms or bodies, with or without material, like they think a butterfly would move around looking for a good safe place to lay eggs. Remind students that butterflies will be looking for green leaves for their babies (young caterpillars) to eat when the eggs hatch.



These movements support the **vestibular** and **proprioceptive** senses.

Card 2

You will need: Yellow hook dots and felt leaves representing eggs to be laid onto a leaf.

What to do: Encourage students to take some dots to place onto the leaf. Would you place them close together or far apart? What would be the safest for the eggs?



This action supports the senses of **touch** and **sight**.

Card 3

You will need: A jar, or similar, containing the smell of mustard.

Young caterpillars eat the cabbage leaves very quickly to extract mustard oil to make their bodies smell nasty which puts birds off from eating them. It's a way of protecting the caterpillars from being eaten by birds.

What to do: Encourage students to breathe through their noses and before sniffing, blow out through the nose before taking a breath in of the smell of mustard. Do this a couple of times. Do the students like or dislike the smell? Would they like to eat a caterpillar if they were a bird?



This exercise promotes the sense of **smell**.

Card 4

You will need: Clay or play dough and ruler.

A Cabbage White caterpillar will shed its skin four times, getting bigger each time. The longest they grow is 45mm long.

What to do: Encourage students to roll some clay or play dough into 4 lengths of caterpillar shapes. Can they measure 45mm? Look at the colours of the caterpillar. Can the students find those same colours in nature around them?



This action supports the senses of **touch** and **sight**.

Card 5

You will need: Just an arm or a hand and a ball of soft yarn.

Some caterpillars look for a sheltered horizontal branch and co-coon itself into a chrysalis, hanging by silk threads. Some will use sticky silk pads to stick themselves to tree trunks. They will stay like this for 2 weeks or, if it is cold, over winter.

What to do: Ideally the students could work in pairs, if not then demonstrate with individual students. Hold an arm out horizontally (you could discuss the merits of horizontal and vertical) and let the hand dangle vertically. The arm represents the branch and the hand is the pupating caterpillar. Wrap the hand **loosely** with the yarn as if it is being cocooned. Continue on to the next marker with wrapped hands.



This action supports **proprioception**.

Card 6

You will need: A wrapped hand (the chrysalis).

What to do: Unwrap the hand (the pupa) from the yarn.

What does it feel like to have an unwrapped hand?



This action supports the senses of **proprioception**, **touch** and **sight**.

Card 7

You will need: Just yourselves.

What to do: Move around, or use your hands, to dance around like a freshly emerged butterfly. What would you do? Where would you go? What if it is raining? What if it is sunny? What can you smell? What would you eat? What would you listen out for? How will you rest?

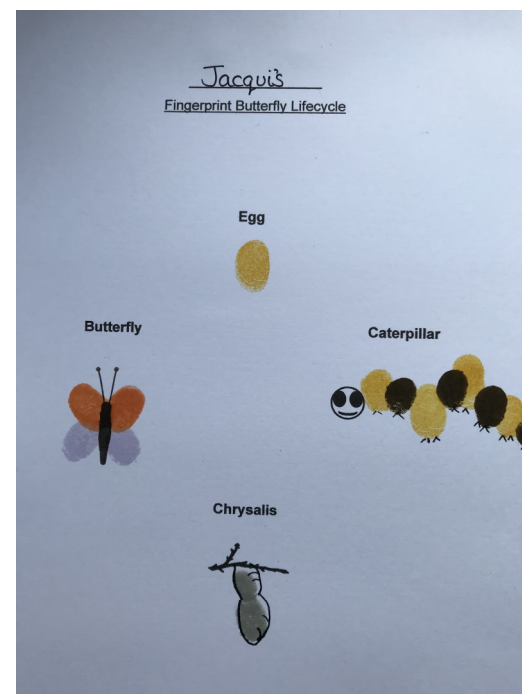


Can you use all your senses for this exercise?

Card 8

You will need: Fingerprint butterfly lifecycle layout and stamping ink.

What to do: Follow the instructions to reproduce the butterfly lifecycle through fingerprint art.



This exercise supports the senses of **touch** and **sight** and consolidates the sensory learning.



Butterfly Life Cycle

TEACCH Style Worksheet*	2 - 3
Semi-formal Worksheets*	4 - 5
Formal Worksheets*	6 - 7

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* The number of spirals in the top left hand corner of the page, increase with the difficulty of the worksheet. This could be more difficult questions or lessened support.





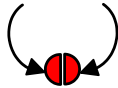
Fingerprint Butterfly Life Cycle



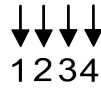
to be able to explore and understand the life cycle and stages of a butterfly using the senses and kinaesthetic learning



Use your fingerprint



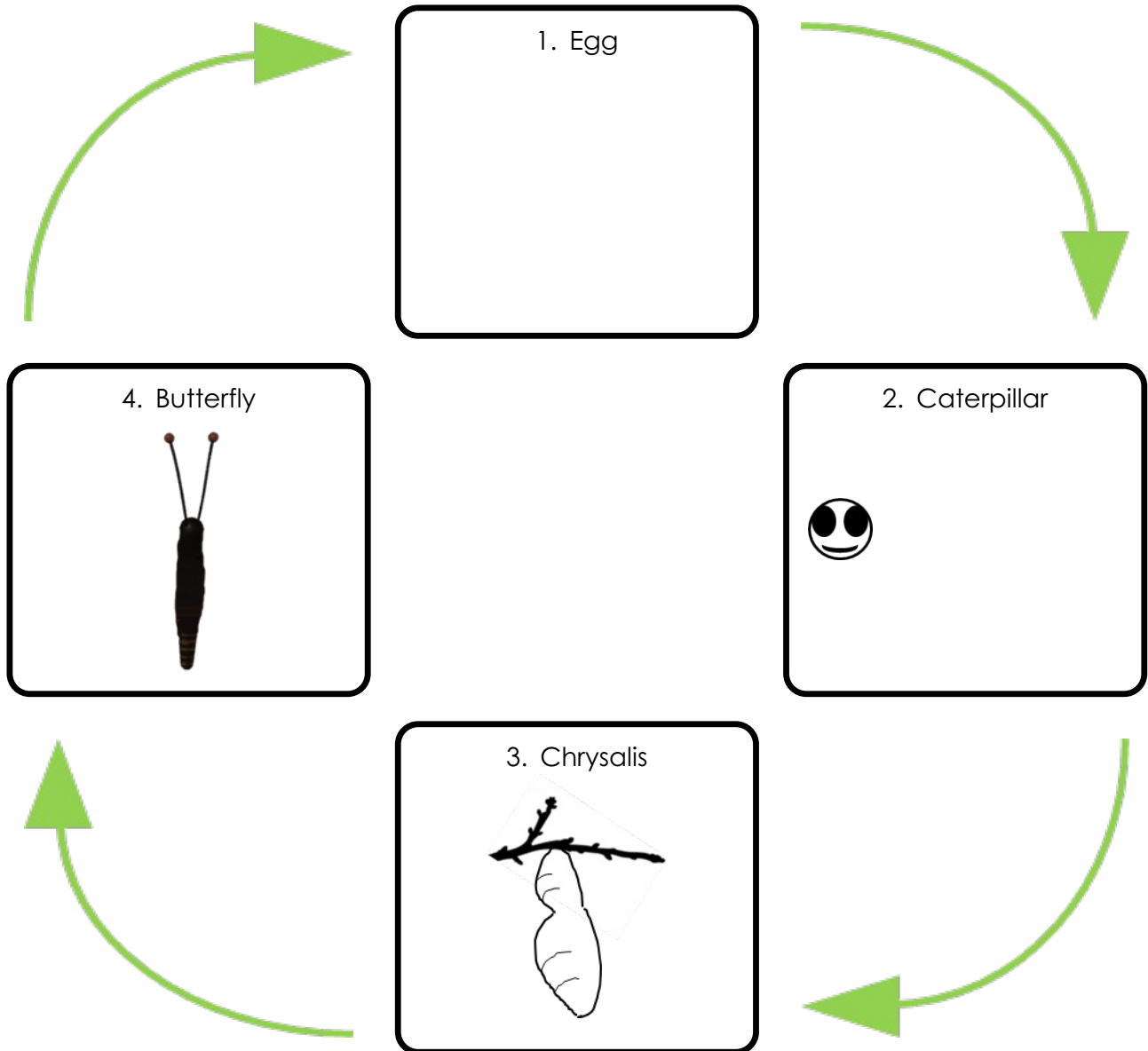
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the stages of the



butterfly life cycle

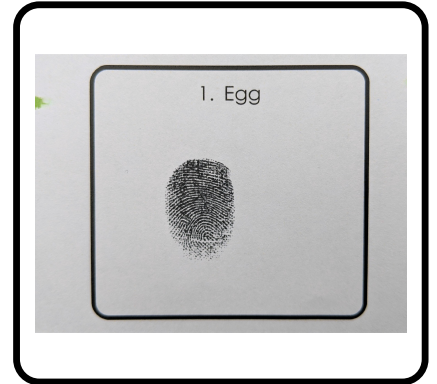
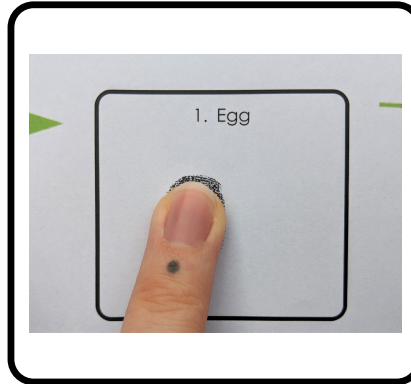




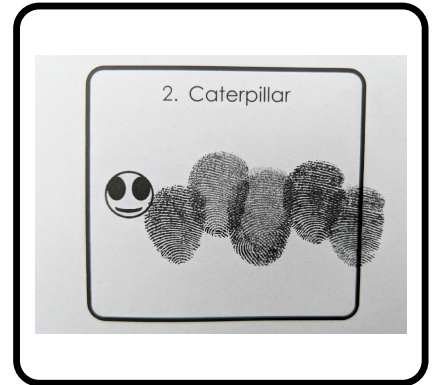
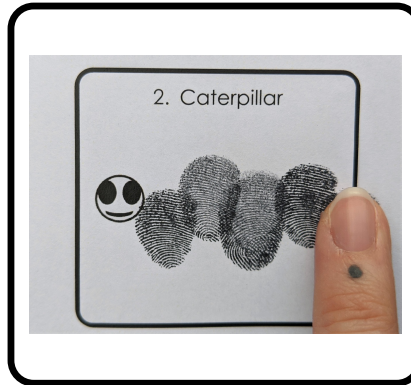
TEACCH Style Instructions

Cut each strip and staple together.

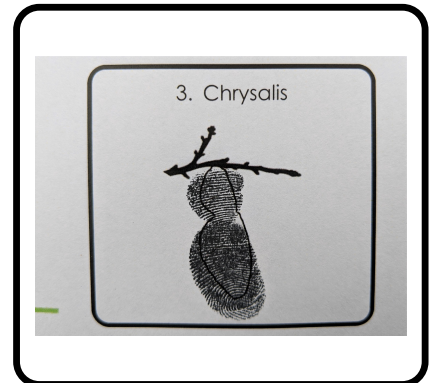
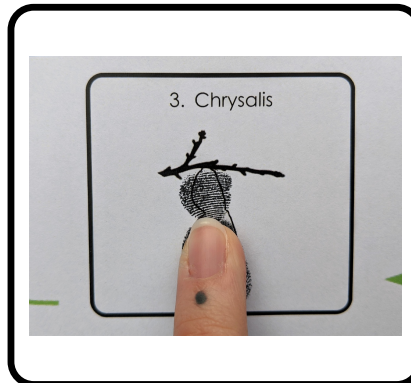
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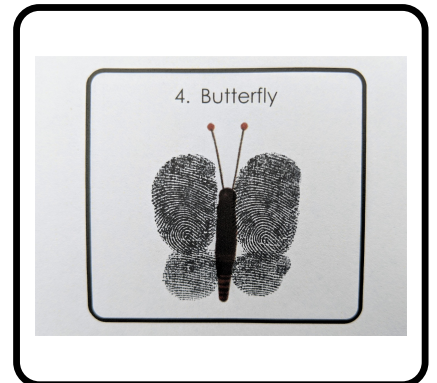
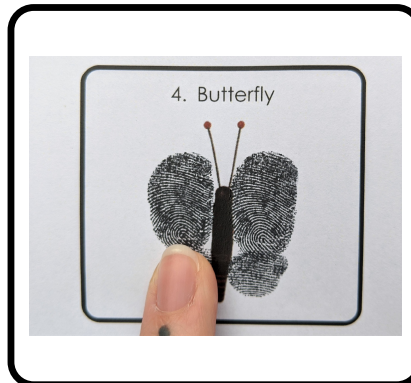
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3



4





Fingerprint Butterfly Life Cycle



to be able to explore and understand the life cycle and stages of a butterfly using the senses and kinaesthetic learning



Use your fingerprint



to make



the stages of the



butterfly life cycle,



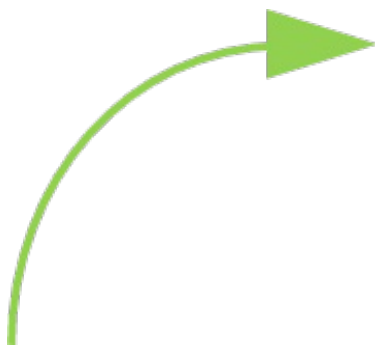
use the key words



to label



the stages



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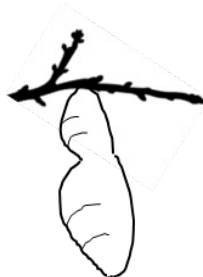
2.



4.



3.



key words



chrysalis



egg



caterpillar



butterfly



Fingerprint Butterfly Life Cycle



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Use your fingerprint



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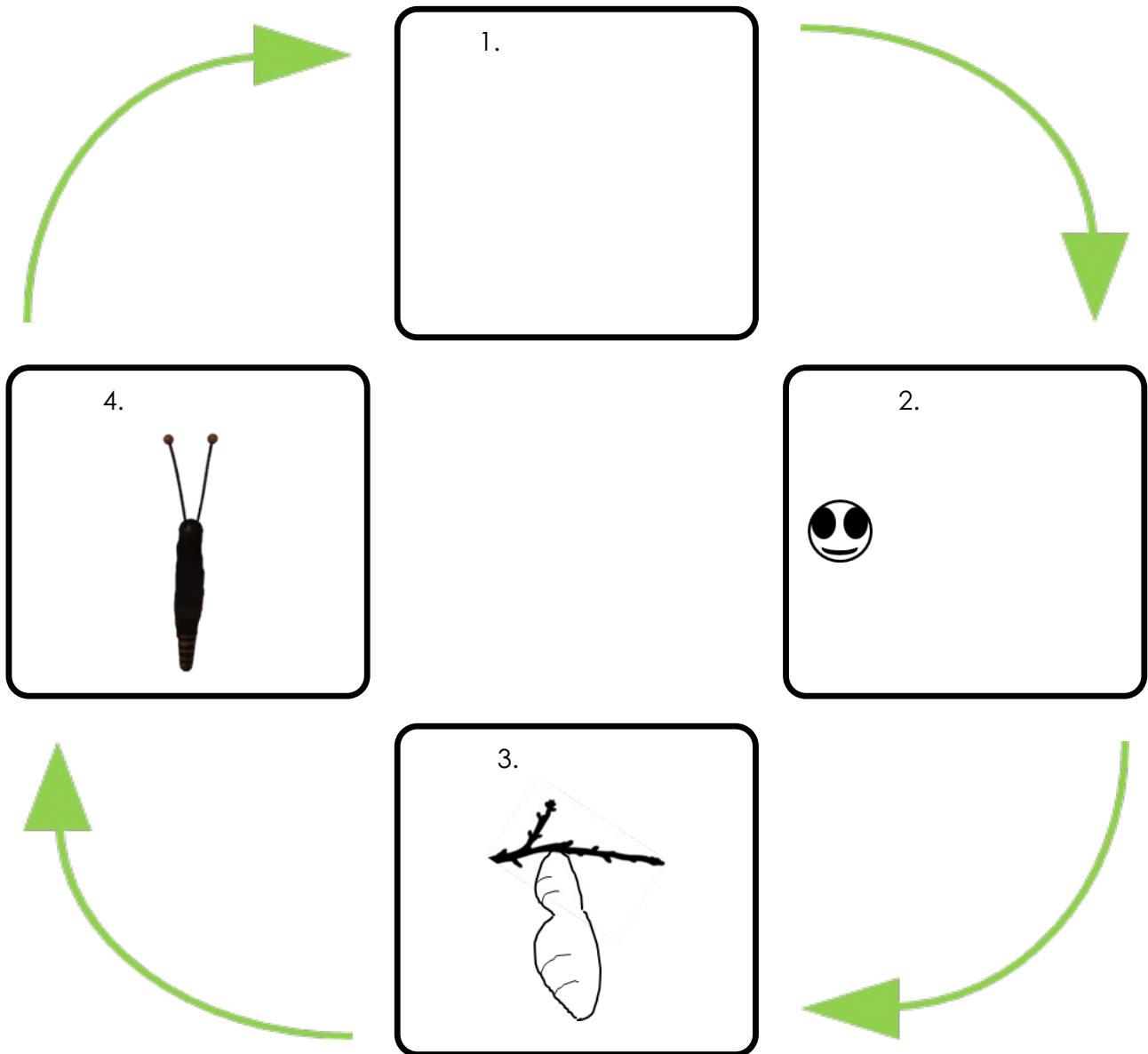
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key words

chrysalis

egg

caterpillar

butterfly

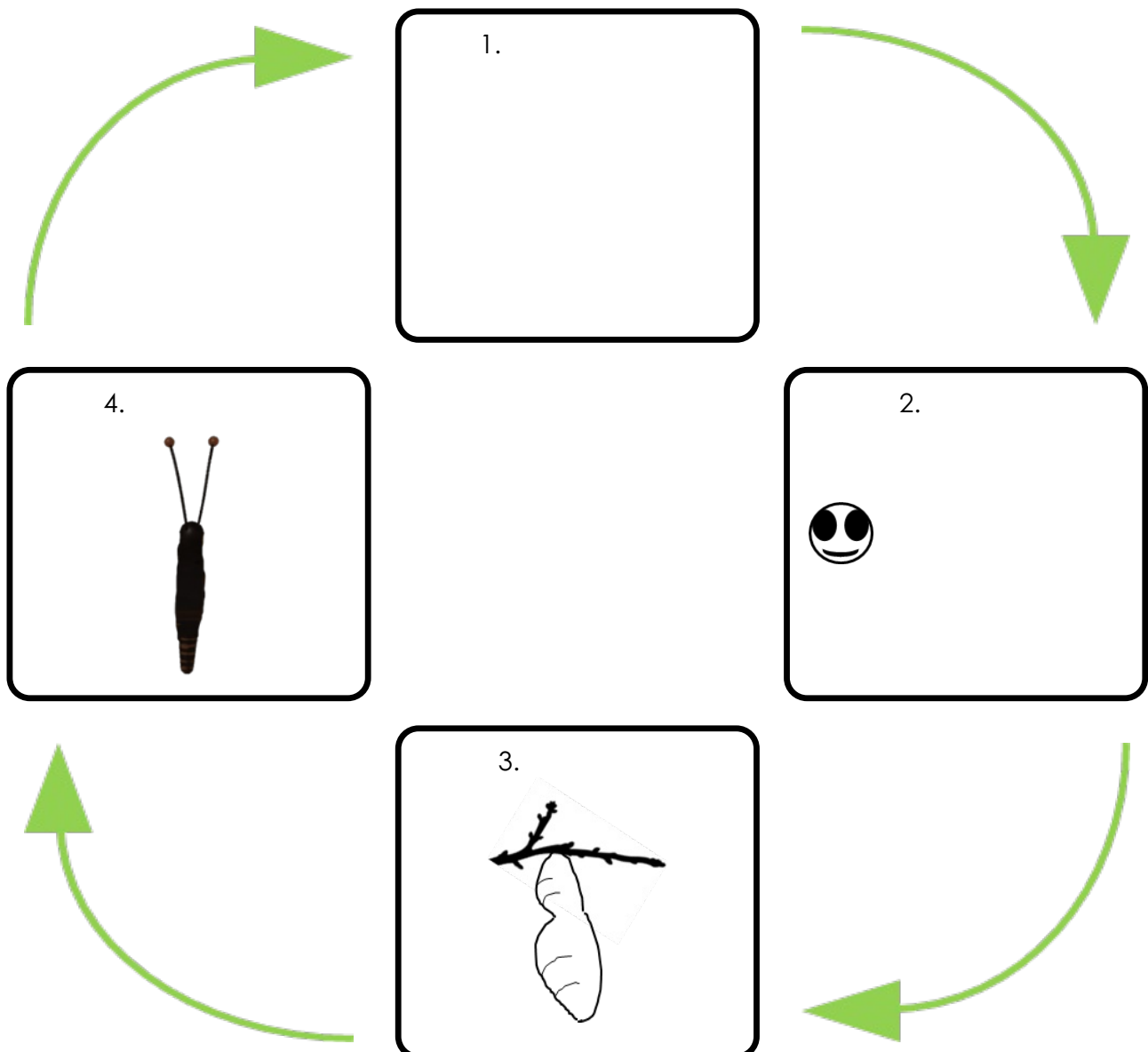


Fingerprint Butterfly Life Cycle



to be able to explore and understand the life cycle and stages of a butterfly using the senses and kinaesthetic learning

1. Use your fingerprint to create the stages of the butterfly life cycle.
2. Label the different stages
3. Research the butterfly life cycle and answer the questions on the next page.





Fingerprint



Butterfly Life Cycle



to be able to explore and understand the life cycle and stages of a butterfly using the senses and kinaesthetic learning

1. What is it called when a caterpillar turns into a butterfly?

2. Is it the male or female who lays the eggs? And where do they lay them?

3. How many times does a caterpillar *shed* their skin?

4. Where on a plant does a caterpillar turn into a chrysalis?

5. Why doesn't a butterfly fly away as soon as it comes out of it's chrysalis? And what does it need to do?
