



# Life Cycle Escape Room

## Purpose:

Escape rooms are an activity that has been growing in popularity among many young and elder students. Escape rooms can help teach problem-solving and test knowledge of specific topics. In this escape room, students must use their knowledge about life cycles, with a focus on metamorphic species.

## Materials:

- Escape Room print out sheets
- Large enough room to have separate corners for designated levels

## Set-Up

- 1) Print off the appropriate papers for each level of the escape room
- 2) Designate 4 corners, one for each level of the activity
- 3) Keep the answer sheets separated for checking after each attempt to move to the next level
- 4) The final lock for the escape room should be in the middle of the room and can only be attempted once all other levels have been completed

## Directions:

- Read the introduction of the escape room to the students and clarify any rules (specified below)
  - You must complete the current level before moving on to the next
  - you can complete the questions in each level in whatever order you choose to complete them
  - You can receive \_\_\_hints in each level and a total of \_\_\_\_hints throughout the escape room
  - You cannot leave the room once the escape room has begun (unless a valid reason is presented - discernable by the teacher)
  - The escape room can either have a time limit of \_\_\_\_\_or be timed to see how long it takes
- Either have the students complete the escape room individually, in teams, or collectively as a class including everyone's opinions
- Begin the escape room, giving hints or assistance as needed



# Mission Objective

A mad scientist trapped your whole class in the classroom. In order to escape, you must use your knowledge of life cycles to convince him to let you go. Answer the questions at each level and be sure to record each answer. Once all levels are complete, retrieve the completion code to break out and save the day. You must hurry before you remain trapped in the class forever!

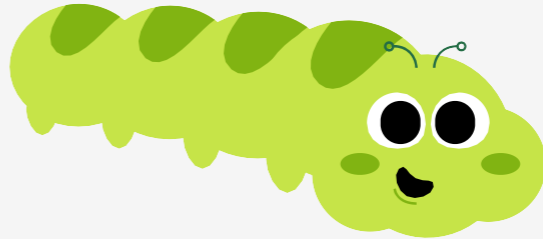


# LEVEL 1

Q1

A young wingless form of many insects that hatches from an egg, such as a caterpillar or a grub is called a(n):

- A. Seed
- B. Egg
- C. Embryo
- D. Larva

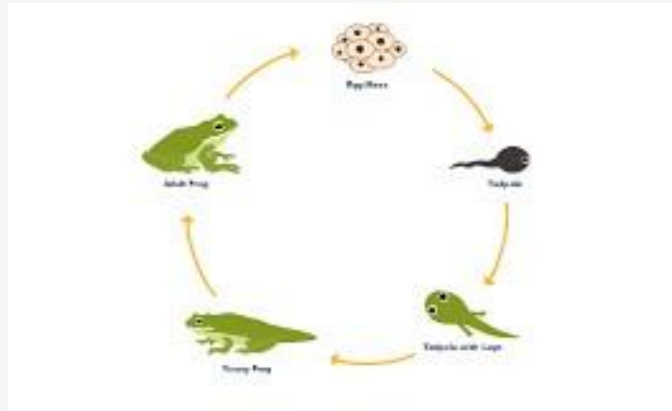


# LEVEL 1

Q2

All the parts of an animals life from birth to death are called:

- A. Growth
- B. Evolution
- C. Life Cycle
- D. Maturation



# LEVEL 1

Q3

What is the name for the type of life cycle when a juvenile looks nothing like the adult it will turn into?

- A. Metamorphosis
- B. Development
- C. Transformation
- D. Converting



# LEVEL 1

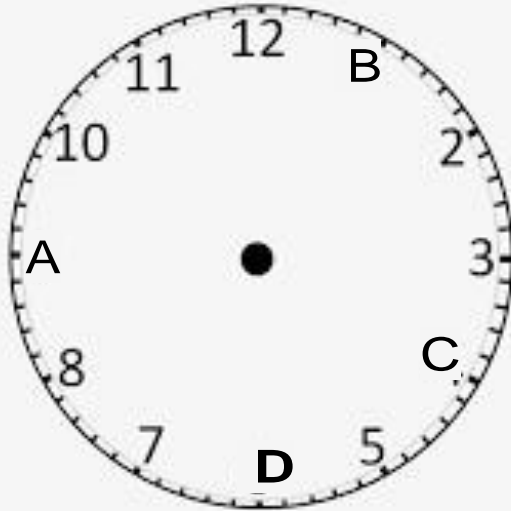
Q4

What is a young frog called when it has developed legs and arms but still has a tail?

- A. Tadpole
- B. Froglet
- C. Frog
- D. Tadpole with legs



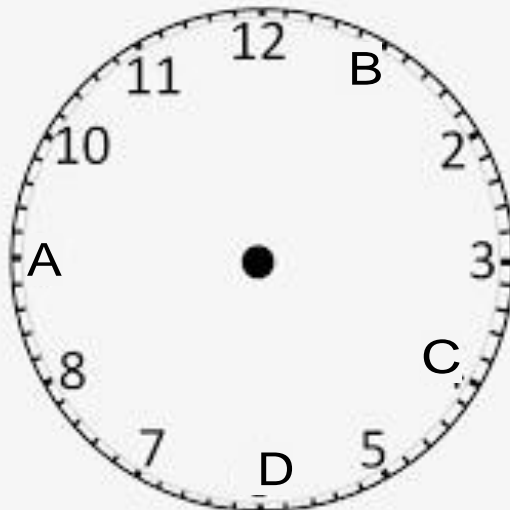
# LEVEL 1 DECODER





# LEVEL 1

## ANSWERS



Q1: D Q2: C Q3: A Q4: B

Decoder Answer: 6491



# LEVEL 2

Q1

What life cycle stage follows the larval stage in butterflies?

- A. Adult
- B. Egg
- C. Pupa
- D. Egg



# LEVEL 2

Q2

What animal does not go through metamorphosis?

- A. Earthworm
- B. Ladybug
- C. Wasp
- D. Salamander



# LEVEL 2

Q3

How many stages are there in complete metamorphosis?

- A. 3
- B. 5
- C. 6
- D. 4



# LEVEL 2

Q4

What is the most mature stage of an organism's life cycle?

- A. Senior
- B. Adult
- C. Maturity
- D. Adolescent



# LEVEL 2

## DECODER



3	+	2	=	<b>A</b>
+		+		+
1	+	<b>C</b>	=	4
=		=		=
<b>D</b>	+	5	=	<b>B</b>



# LEVEL 2

## DECODER ANSWER

3	+	2	=	A
+		+		+
1	+	C	=	4
=		=		=
D	+	5	=	B

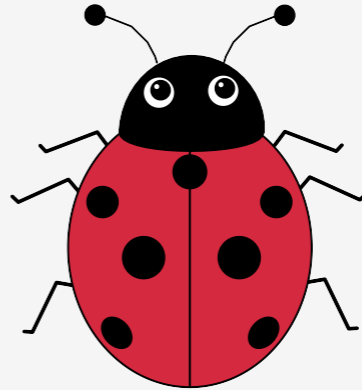
Q1: C Q2: A Q3: D Q4: B

Decoder Answer: 3549

# LEVEL 3

Q1

What does an adult ladybug eat?



- A. Nectar
- B. Ants
- C. Leaves
- D. Aphids

# LEVEL 3

Q2

Caterpillars can eventually turn into a butterfly. What is the structure called that they sleep in while undergoing this change?

- A. Exoskeleton (skeleton on the outside)
- B. Chrysalis (cocoon)
- C. Shell
- D. None of the above





# LEVEL 3

Q3

Which order of a metamorphic life cycle is correct?

- A. Adult, egg, pupa, larva
- B. Egg, pupa, larva, adult
- C. Larva, pupa, adult, egg
- D. Egg, larva, adult, pupa



# LEVEL 3

Q4

At which life cycle stage can an animal reproduce and lay eggs?

- A. Adult
- B. Egg
- C. Larva
- D. Pupa



# LEVEL 3 DECODER

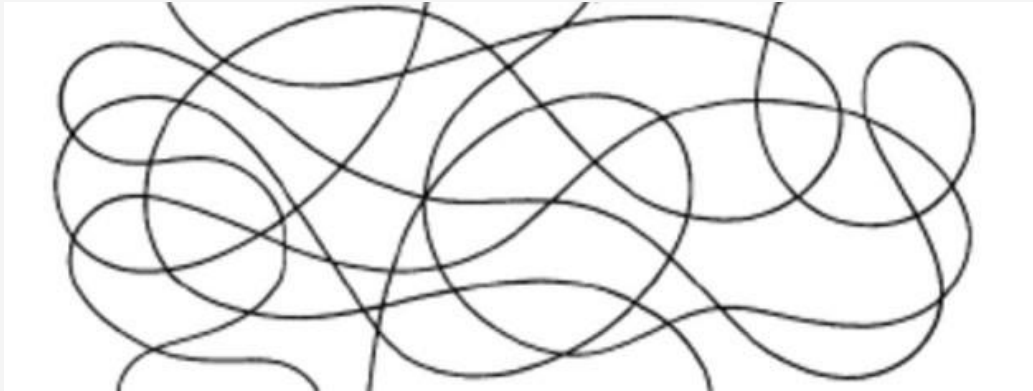


A

B

C

D



1

2 3

4

# LEVEL 3

## DECODER ANSWER

A B C D



1 2 3 4

Q1: D Q2: B Q3: C Q4: A

Decoder Answer: 1324

# LEVEL 4

Q1

What is the correct order of a frogs life cycle?



- A. Egg, tadpole, frog, froglet
- B. Egg, froglet, tadpole, frog
- C. Frog, egg, froglet, tadpole
- D. Egg, tadpole, froglet, frog



# LEVEL 4

Q2

The image on the left is the pupa stage of a metamorphic insect. What will its adult stage be?



- A. Ladybug
- B. Moth
- C. Grasshopper
- D. Wasp

# LEVEL 4

Q3

A caterpillar eats \_\_\_\_\_ until it grows into a butterfly. Then as an adult butterfly, it will eat \_\_\_\_\_.



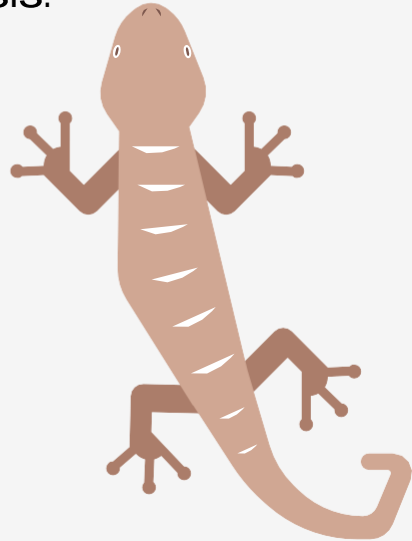
- A. leaves and greens; small insects
- B. leaves and greens; nectar
- C. small insects; nectar
- D. nectar ; greens and leaves

# LEVEL 4

Q4

Salamanders are a(n) \_\_\_\_\_ and \_\_\_\_\_ go through metamorphosis.

- A. Amphibian; won't
- B. Reptile; won't
- C. Amphibian; will
- D. Reptile; will





# LEVEL 4

## DECODER

A

B

C

D

Q1



= 2

Q2



= 0

Q3



= 9

Q4



= 3

# LEVEL 4

## DECODER ANSWER

A B C D

Q1						= 2
Q2						= 0
Q3						= 9
Q4						= 3

Q1: D Q2: A Q3: B Q4: C

Decoder Answer: 3092



# FINAL ESCAPE

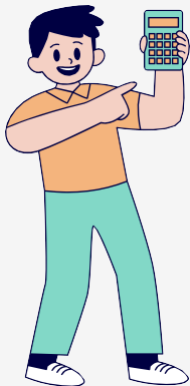
You were able to answer all the mad scientist's questions. Congratulations! The mad scientist did not expect you to get them all correct and complete his tasks. Now, he is very angry and placed a final lock to keep you in while he makes his great escape!

To finally be free of your classroom, go back to your decoders for each level and find the hidden clues to help solve the final puzzle and open the lock!

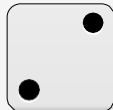


# FINAL ESCAPE

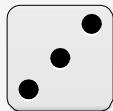
## DECODER



A



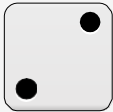
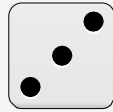
B



C





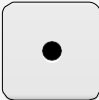





D





# FINAL ESCAPE

## DECODER ANSWER

A		
B		
C		
D		

L1: D L2: A L3: B L4: C

Decoder Answer: 5849