

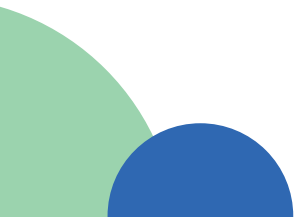
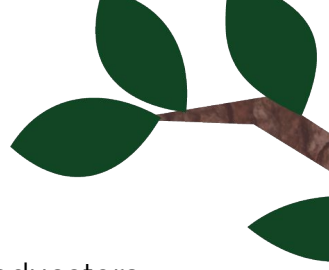


Teacher's guide

génélab.

# Introduction

Digital culture plays a key role in today's world. Understanding and taming it is becoming essential for educators.



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- Creation of a musical instrument: castanets

### Chapter 5 :

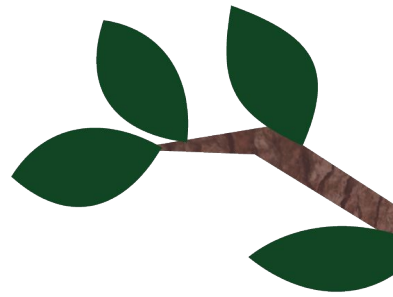
- Educational planning
- The cicada and the ant, the moral
- Observation form: The cicada and the ant, the moral

### Bonus

- Sound insects: interactive workbook
  - Instructions
  - Correction
  - Interactive notebook
  - Cut-out notebook

### References

# Set up



## A. Individual progress

- Students have a Ziggy kit and a computer connected to the Internet. Everyone progresses at their own pace.

## B. In-class progress

- The teacher and/or facilitator projects the activity in front of the class. The learning process is carried out in a group, in a classroom setting. The information capsules are read aloud to the students and the quizzes are taken by hand.

# Chapter 1

## 1. Educational planning

- a. Observation form
- b. Additional activity to print and correction



# Chapter 1: Educational planning

**Academic level:** Primary cycle 1

## Themes

- Sound insects: The cicada
  - physical characteristics
  - its lifestyle
- Science and technology: introduction to micro:bit

## Online quiz: [observation form](#)

- Discipline: English, teaching language
- Skills: C2 : Read a variety of texts
- Criteria: Explicit comprehension of a text.

## Additional activity to print:

- Discipline: Mathematics
- Skills: C2: Reasoning using mathematical concepts and processes
- Criteria: Use mathematical concepts and processes appropriate to the situation

## Chapter progress

1. Ziggy's story 1
2. The cicada
3. Lifestyle
4. Introduction to micro:bit
5. Quizz 1

## Digital resources

- <https://www.genielab.co>
- <https://espacepourlavie.ca/insectes-arthropodes/cigales>
- 

## Literature resources

- [Les bestioles d'ici](#)
- [Le guide complet des insectes et des araignées](#)
- [Le fan club des petites bêtes](#)
- [Les petites bestioles du Québec](#)
- [Les insectes en bande dessinée](#)

# Observation form: read a variety of texts

**Quiz 1:** Observe explicit comprehension of a text.

| <b>Understanding significant elements of a text</b> | Achieved   | Not achieved |
|---|--|--------------|
| Complete the following sentence: Ziggy is a _____   | A ( Cicada)  | B or C       |
| Why do you think Ziggy cannot sing?                 | B (Ziggy is a female cicada.<br>Female cicadas cannot sing.) | A or C       |
| What is a micro:bit?                                | B (What is a micro:bit?)                                     | A or C       |

# Additional activity to print: correction

## Ziggy and the rock maze

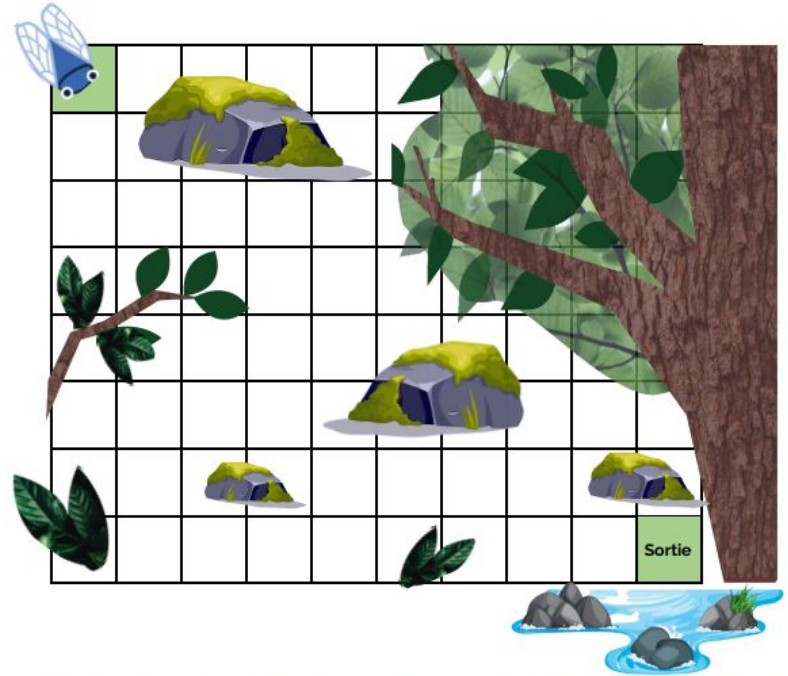
Additional math activities on the theme of ziggy.

### Mathematics primary cycle 1

- Skills: 2 Reasoning using mathematical concepts and processes
  - Component: Use mathematical concepts and processes appropriate to the situation
  - Domain: Geometry, spatial sense
    - locating on a map

## Chapitre 1 : Ziggy et le labyrinthe de rochers

Aide Ziggy à se rendre à la rivière en évitant les obstacles.



Dessine à l'aide de flèches, la route que doit prendre Ziggy afin de se rendre à la rivière.  
Exemple : → ↓ ↑ ↑

|   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|
| ↓ | ↓ | → | → | → | ↓ | ↓ | ↓ | ← | ← | ↓ |
| ↓ | → | → | → | ↑ | → | → | → | ↓ | → | → |



# Chapter 2

## 1. Educational planning



# Chapter 2

**Academic level :** Primary cycle 1

## Themes

- Sound insects: field cricket
- Science and technology: the accelerometer
- Science and technology: Using a micro:bit to follow instructions in a game.

## Chapter progress

1. Ziggy's story 2
2. The grasshopper
3. Description of an accelerometer
4. Game 1: Repeat after me

## Digital resources

- <https://www.genielab.co>
- <https://mffp.gouv.qc.ca/jeunesse/chant-insectes-difference-grillon-sauterelle-criquet/>
- <https://espacepurlavie.ca/insectes-arthropodes/criquet-des-champs>

## Literature resources

- [Les bestioles d'ici](#)
- [Le guide complet des insectes et des araignées](#)
- [Le fan club des petites bêtes](#)
- [Les petites bestioles du Québec](#)
- [Les insectes en bande dessinée](#)

# Chapter 3

1. Educational planning
2. Additional activity to print:
  - a. Grasshopper body parts
  - b. Correction



# Chapter 3 :

**Academic level:** Primary cycle 1

## Thème

- Sound insects: the grasshopper
- Science and technology: LED display
- Science and technology: Using a micro:bit to follow instructions in a game.

**Additional activity to print:** [Grasshopper body parts](#) - [correction](#)

- Discipline : English, teaching language
- Skills: C2 : Read a variety of texts
- Criteria : Explicit comprehension of a text.

## Chapter progress

1. Ziggy's story 3
2. The locust
3. LED display
4. Game 2: Touch-sensitive music

## Digital resources

- <https://www.genielab.co>
- <https://makecode.microbit.org/>

## Literature resources

- [Les bestioles d'ici](#)
- [Le guide complet des insectes et des araignées](#)
- [Le fan club des petites bêtes](#)
- [Les petites bestioles du Québec](#)
- [Les insectes en bande dessinée](#)

## Chapter 3: The locust's body parts



Read the following text and use arrows to link the names to the grasshopper's body parts.

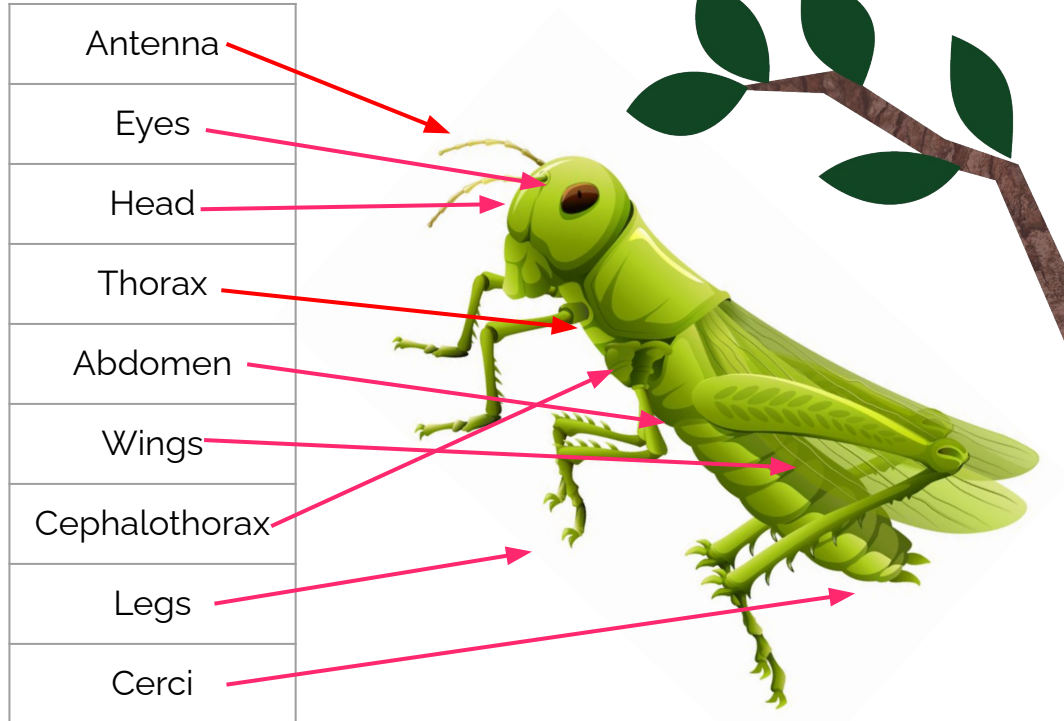
|               |
|---------------|
| Antenna       |
| Eyes          |
| Head          |
| Thorax        |
| Abdomen       |
| Wings         |
| Cephalothorax |
| Legs          |
| Cerci         |



The locust has a small **head**, bright **eyes** and slender **antennae**. Its body is slender and elongated. It is divided into three parts: the **thorax**, the **abdomen** and the small piece in between, called the **cephalothorax**. The tiny wings are on its back. It has long, muscular hind **legs**. It also has shorter front legs to catch its food. The **cerci** are small, filament-like structures at the back of the abdomen.

## Chapter 3: The locust's body parts

Read the following text and use arrows to link the names to the grasshopper's body parts.



## Correction

The locust has a small **head**, bright **eyes** and slender **antennae**. Its body is slender and elongated. It is divided into three parts: the **thorax**, the **abdomen** and the small piece in between, called the **cephalothorax**. The tiny wings are on its back. It has long, muscular hind **legs**. It also has shorter front legs to catch its food. The **cerci** are small, filament-like structures at the back of the abdomen.

# Chapter 4

1. Educational planning
2. Additional activity:
  - a. Make your own castanets



# Chapter 4

**Academic level :** Primary cycle 1

## Theme

- The music
- Science and technology: buttons and conductive pads

**Additional activity:** [Create your own musical instrument](#)

- A 45-minute activity to create castanets with simple materials.

## Chapter progress

1. Ziggy's story 4
2. The music
3. Description of the conductive pad

## Digital resources

- <https://www.genielab.co>
- <https://makecode.microbit.org/>

## Literature resources

- [Les bestioles d'ici](#)
- [Le guide complet des insectes et des araignées](#)
- [Le fan club des petites bêtes](#)
- [Les petites bestioles du Québec](#)
- [Les insectes en bande dessinée](#)



# Make your own castanets!!!

Creating a musical instrument with materials from home?!

## Materials:

- Cardboard sheets or cardboard packaging
- Scissors
- Glue or paper tape
- 4 Bouchons ou capsules de métal
- 4 Metal stoppers or caps, ...

## Instructions :

### Step 1: Cutting the shapes

- Draw two squares or rectangles of equal size from the cardboard sheets. These will be the main part of the castanets.
- Cut the shapes.

### Step 2: Decoration (optional)

- Before assembling the castanets, decorate their cardboard pieces with crayons, stickers, glitter, etc.

### Step 3: Assembling

- Glue a cork to each end of the cardboard pieces.

### Step 4: Pressing and drying

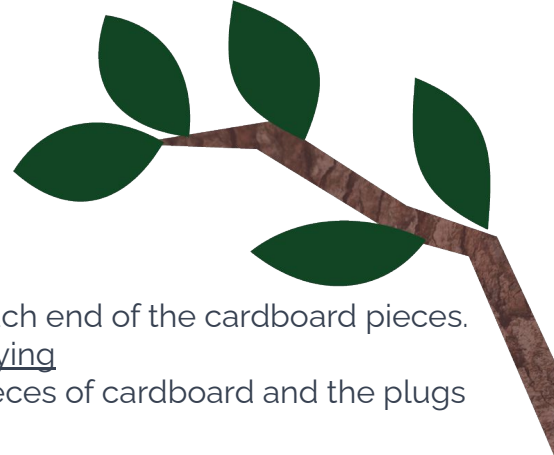
- Press the two pieces of cardboard and the plugs firmly together.
- Let it dry

### Step 5: Creating handles

- Once the glue is dry, cut two strips of cardboard about 2-3 cm wide and the length of the castanet.
- Glue one end of each cardboard strip to the outside of the castanets, leaving the other end free to act as a handle.

### Step 6: Game

- By tapping the castanets together, you can create fun sounds by rattling them.



# Chapter 5

1. Educational planning
2. Additional activity:
  - a. The cicada and the ant, the moral
  - b. Observation form



# Chapter 5 :

**Academic level :** 1er cycle du primaire

**Theme:**

- Discovering a variety of texts
  - La Fontaine's fable, the cicada and the ant
- Science and technology: Using a micro:bit to follow instructions in a game.

**Évaluation:**

The cicada and the ant, the moral

- Discipline : Ethics and religious culture
- Skills: C1 : Reflecting on ethical issues
- Criteria: Moral understanding  
Participating in discussions  
Creativity in activity

**Chapter progress**

1. Ziggy's story 5
2. The cicada in literature
3. Game 3: Musical awakening

**Digital resources**

- <https://www.genielab.co>
- <https://makecode.microbit.org/>

**Literature resources**

- [Les bestioles d'ici](#)
- [Le guide complet des insectes et des araignées](#)
- [Le fan club des petites bêtes](#)
- [Les petites bestioles du Québec](#)
- [Les insectes en bande dessinée](#)

# The cicada and the ant, the moral

**Activity objective :** Understand the moral of the fable "The Cicada and the Ant" while taking part in fun, creative activities.

**Duration:** About 45 minutes

## Materials required :

- An adapted and illustrated version of the fable.
- Sheets of paper and coloured pencils.

## Process:

### Introduction (10 minutes) :

- Gather the children in a circle and briefly explain that they are going to take part in an activity based on a fable called "The Cicada and the Ant". This can be done before or after Chapter 5.

Reading the fable (10 minutes) : Read or tell children an adapted, illustrated version of the fable "The Cicada and the Ant".

Discussion (10 minutes) : After reading the fable, ask questions to help children understand the moral of the story. Ask them why the ant had foresight and why the cicada had a hard time in winter.

Creative activity : Create your own cicada or ant (20 minutes) :

- Distribute sheets of paper and crayons to the children.
- Ask the children to draw a cicada or an ant based on the story.

Conclusion and final discussion (10 minutes) :

- Gather the children in a circle and ask them what they've learned from the story of the cicada and the ant.
- Briefly summarize the moral of the story: "It's important to be far-sighted and prepare for the future, like the ant, rather than thinking only of immediate pleasure, like the cicada."
- Encourage children to think of everyday situations where this lesson might apply.



# Observation form: The cicada and the ant, the moral

| ECR                                 | Skills 1 : Reflecting on ethical issues   |   |   |   |
|-------------------------------------|---|---|---|---|
| <u>Observation criteria</u>         | <u>Level 4 (Excellent)</u>  | <u>Level 3 (Good knowledge)</u>   | <u>Niveau 2 (In development)</u>  | <u>Niveau 1 (To improve)</u>                                    |
| <b>Moral understanding</b>          | Fully understands the moral of the story and explains it in pertinent detail.   | Understands the moral of the story and can give an adequate explanation.                    | Has a basic understanding of morality, but may need a few reminders.              | Has trouble understanding or explaining the moral of the story. |
| <b>Participating in discussions</b> | Actively participates by asking pertinent questions and engaging in constructive discussions.                           | Participates regularly by answering questions and sharing ideas.                            | Sometimes takes part in discussions, but doesn't often take the initiative.       | Generally avoids discussions and rarely contributes.            |
| <b>Creativity in activity</b>       | Shows great creativity in creating detailed, imaginative drawings, demonstrating a thorough understanding of the story. | Demonstrates creativity by creating interesting and relevant drawings related to the story. | Shows some creative elements in the drawings, but may lack detail or originality. | The drawings lack creativity and relevance to the story.        |

# Bonus

- **Sound insects: the interactive workbook**



# Instructions

## What is an interactive workbook :

- An interactive notebook combines traditional note-taking elements with interactive ones to make learning more engaging, interactive and personalized. This can improve understanding and retention of information, as well as promoting collaboration between students.

## Sound insects, interactive workbook:

- Our notebook is organized like a small booklet, printed on both sides and folded in half. It is composed of 4 sections: the cicada, the cricket, the cricket and the grasshopper. In the appendix, you'll find a notebook to cut out to complete the interactive workbook.
  - Print one booklet and one cut-out notebook per student.
  - Cut out the dotted tables and paste them in the appropriate section of the interactive notebook.
  - Use the word bank to fill in the blanks.
  - Use the answer key on the next page as a guide.

# Correction

|                        |  |  |  |
|------------------------|--|--|--|
| <p>The cicada</p>      |  |  |  |
| <p>The grasshopper</p> |  |  |  |
| <p>The cricket</p>     |  |  |  |
| <p>The locust</p>      |  |  |  |



# Sound insects

## The interactive notebook

Continue Ziggy's adventure by completing your interactive notebook with colored pencils, glue and scissors.



# The cicada



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Parts of the body



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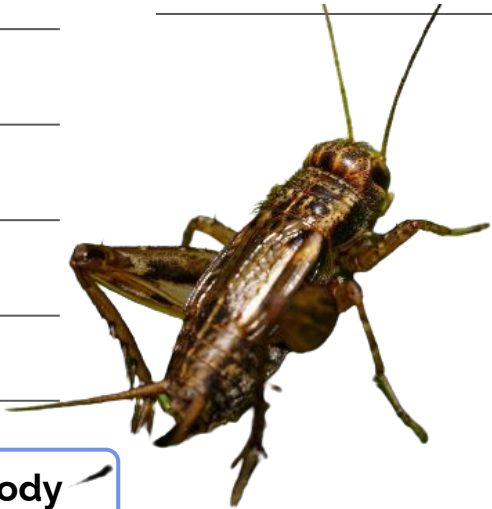
# The grasshopper



Parts of the body



# The cricket



Parts of the body



# The locust



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Parts of the body



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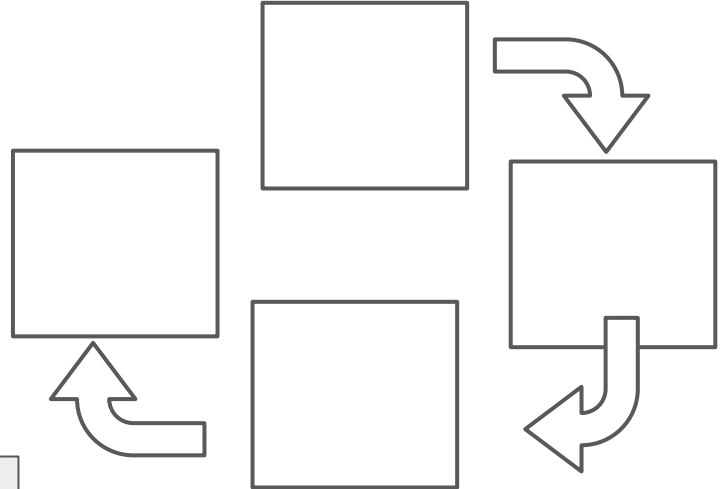
# Cut-out notebook

**Interactive notebook appendix**

**The cicada:** Cut out the following shapes and stick them on the appropriate card in your interactive notebook.



**Draw your cicada**



Lifecycle

**The cicada:** Cut out the following shapes and stick them on the appropriate card in your interactive notebook. (continuation)



## Word bank

- |  |                                   |
|--|-----------------------------------|
| <input type="checkbox"/> Cicada        | <input type="checkbox"/> Eggs     |
| <input type="checkbox"/> Larva         | <input type="checkbox"/> 13 to 17 |
| <input type="checkbox"/> Cicadidae     | <input type="checkbox"/> years    |
| <input type="checkbox"/> Sap           | <input type="checkbox"/> Stridule |
| <input type="checkbox"/> Nymph         | <input type="checkbox"/> Abdomen  |
| <input type="checkbox"/> Thorax        | <input type="checkbox"/> Wings    |
| <input type="checkbox"/> Head          | <input type="checkbox"/> Legs     |
| <input type="checkbox"/> Mature cicada | <input type="checkbox"/> Moults   |

The name

The family

The lifetime

The diet

The sound



**The grasshopper:** Cut out the following shapes and stick them on the appropriate card in your interactive notebook.



Draw your grasshopper



Lifecycle


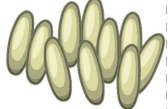
**The grasshopper:** Cut out the following shapes and stick them on the appropriate card in your interactive notebook. (continuation)



**Banque de mots**

- Abdomen
- Herbivore
- Thorax
- 3 to 5 months
- Head
- Legs
- Stridule
- Cerci
- Wings
- Acridides
- Grasshopper

|  |              |
|--|--------------|
|  | The name     |
|  | The family   |
|  | The lifetime |
|  | The diet     |
|  | The sound    |

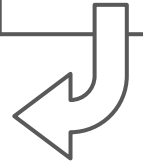
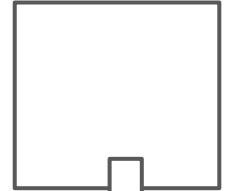
|                                 |   |                         |   |
|---------------------------------|---|-------------------------|---|
| <b>A small wingless cricket</b> |  | <b>A mature cricket</b> |  |
|---------------------------------|---|-------------------------|---|

# The cricket:

Cut out the following shapes and stick them on the appropriate card in your interactive notebook.



Draw your cricket




Lifecycle

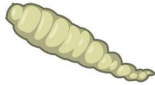
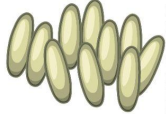
**The cricket:** Cut out the following shapes and stick them on the appropriate card in your interactive notebook. (continuation)



**Banque de mots**

- Abdomen
- Sap
- Thorax
- Gryllidae
- Cricket
- Antennae
- Cerci
- Wings
- 1 year
- Stridule
- Legs
- Omnivore

|   |              |
|---|--------------|
|  | The name     |
|   | The family   |
|   | The lifetime |
|   | The diet     |
|   | The sound    |

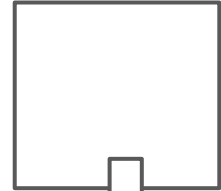
|                       |   |              |   |
|-----------------------|---|--------------|---|
| <b>Mature cricket</b> |  | <b>Nymph</b> |  |
|-----------------------|---|--------------|---|

# The locust:

Cut out the following shapes and stick them on the appropriate card in your interactive notebook.



Draw your locust



Lifecycle

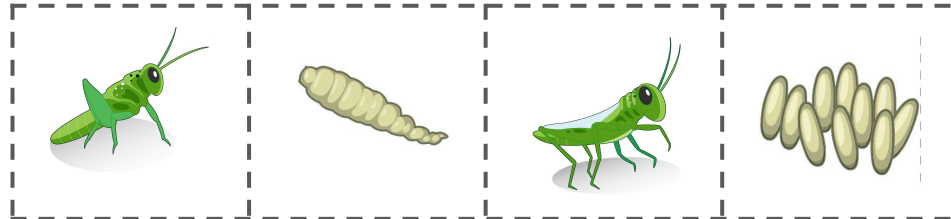
**The locust:** Cut out the following shapes and stick them on the appropriate card in your interactive notebook. (continuation)



**Words bank**

- Abdomen
- Herbivore
- Thorax
- 6 month
- Head
- Grasshopper
- Stridule
- Wings
- Antennae
- Tettigoniidae

|  |              |
|--|--------------|
|  | The name     |
|  | The family   |
|  | The lifetime |
|  | The diet     |
|  | The sound    |



# The end

You have completed the activity.

**Congratulations!**



# Bibliography

## Literature resources

- [Les bestioles d'ici](#)
- [Le guide complet des insectes et des araignées](#)
- [Le fan club des petites bêtes](#)
- [Les petites bestioles du Québec](#)
- [Les insectes en bande dessinée](#)

## Digital resources

- <https://espacepourelavie.ca/insectes-arthropodes/cigales>
- <https://www.sirtin.fr/2011/03/13/dou-vient-la-cymbalisation-des-cigales/>
- [https://www.animateur-nature.com/connaissances\\_faune\\_et\\_sujets\\_generaux/cigale.php](https://www.animateur-nature.com/connaissances_faune_et_sujets_generaux/cigale.php)
- <https://mffp.gouv.qc.ca/jeunesse/chant-insectes-difference-grillon-sauterelle-criquet/>

## Visual resources

- <https://fr.freepik.com>



The image features a white background with three large, overlapping circles in the corners: a yellow circle in the top right, a blue circle in the bottom left, and a teal circle in the bottom left, partially overlapping the blue one. The main text is centered and reads "génénielab." in a large, bold, black sans-serif font. The period at the end of the word is a small, solid purple dot. Below the main text, the tagline "PROPULSER LA CRÉATION NUMÉRIQUE" is written in a smaller, black, all-caps sans-serif font.

**génénielab.**

PROPULSER LA CRÉATION NUMÉRIQUE