INSECTS

STAGE 2 SUGGESTED CLASSROOM ACTIVITIES

Science

ST2-10LW - Describes that living things have life cycles, can be distinguished from non-living things and grouped, based on their observable features.

Student Activity:

Students go out in the playground to look at insects and try to catch a couple to have a closer look at. Students should be placed into groups of 4 or 5. Each group should be given a plastic jar (such as a peanut butter or vegemite jar). The lid should have some small holes (best done by the teacher prior to the lesson). Each group will also need a scribe who has paper and a pencil.

Explain to students the rules for catching insects, as an Entomologist we do not want to hurt the insects we want to study them. We will be catching and releasing the insects today. If students find an insect they should catch it in their group's jar. The scribe should record where the group caught the insect, when and how they caught it.

Set out an area where your students can try collecting, give them plenty of time to try to collect an insect.

Student Activity:

Students should sit as a group with their insect in its jar in front of them. Students should then individually write a description of the insect they have caught and sketch the insect. Students should use this online field guide to identify their insect successfully. Students should characterize why their ‘catch’ is an insect. (6 legs, 3 body parts etc.)

After students have studied their insect take them back outside to release the insect in the same place they found them.

Each group should share one thing they enjoyed about the lesson.

Resources:

Online field guide: http://www.bugfacts.net/index.php

Student Activity:

Watch the YouTube clip below about the honey bee life cycle.

Ask a few students to share something they thought was interesting about the clip. Students should get into groups of three or four. Explain as a group they have to record the honey bee life cycle from the clip. The clip will be played twice with a 3 minutes gap between. During this time students should record the life cycle using a diagram (pictures and words) in as much detail as the can.

The teacher should go around all of the groups and check they have the honey bee life cycle correct.

Resources:

YouTube clip about the honey bee life cycle: http://www.youtube.com/watch?v=VsCmSWoF8PY
INSECTS
STAGE 2 SUGGESTED CLASSROOM ACTIVITIES

Science

ST2-11LW - Describes ways that science knowledge helps people understand the effect of their actions on the environment and on the survival of living things.

Student Activity:
Research endangered or extinct insects.
Design an advertising campaign to save one type of insects from becoming endangered or extinct.
Your ad can be for newspapers, magazines, radio or TV or online.

Student Activity:
Find out how Aboriginal people classified animals.
Present your findings as creatively as possible, using dot artwork around your text.

Mathematics

MA2-18SP - Selects appropriate methods to collect data, and constructs, compares, interprets and evaluates data displays, including tables, picture graphs and column graphs

Student Activity:
Using your bug catcher, draw a picture or take a photo of the insects you catch before you release them.
Develop a presentation on your insect.
Go online and research the scientific name for the insect you have found and write three facts about the insect. Compare your insect(s) to others collected by your classmates.
Construct a graph that shows the collection of insects in your class.

Student Activity:
Research the type of insects that live in your local area.
Make a list of them.
Choose two other 'areas' found in two different states and research what types of insects are living there.
Present your findings in a table as well as a picture graph.
1. Unscramble these insect names:
   - ccrahokoc ____________________________
   - uhlbsfy ____________________________
   - rcetckik ____________________________
   - erigew ____________________________
   - evlwei ____________________________

2. Find the scientific names for these insects:
   - Gumleaf grasshopper ____________________________
   - Ivy leafroller ____________________________
   - Koch’s sandgroper ____________________________
   - Museum beetle ____________________________
   - Owlet moth ____________________________

3. Draw the following insects:
   - A. Carpenter Ant
   - B. Bumblebee
   - C. Cicada

4. Briefly describe each insect you drew above:
   A. ____________________________
   B. ____________________________
   C. ____________________________
INSECTS

STAGE 3 SUGGESTED CLASSROOM ACTIVITIES

Science

ST3-10LW - Describes how structural features and other adaptations of living things help them to survive in their environment.

Student Activity:
Explain to students the three types of adaptations: physical, physiological, and behavioural. Adaptations may be behavioural, such as when a butterfly bask in the sun to warm up; physical, such as having camouflage or warning colours; or physiological (a body process), like storing toxins in their bodies or going into hibernation and having their respiration rates drop and body temperatures cool. Students choose one insect and draw its physical and structural features. Research the behaviour of this insect to determine how it survives in its environment.

Student Activity:
Entomologists are passionate about insects and making sure they are going to be on earth for many generations to come. One insect which was thought to be extinct in 1930 was the Lord Howe Island Stick Insect. It was rediscovered in 2001 and is thought to be the rarest insect in the world as there are only 24 living specimens. Your task is to research this insect and influence people around the world this insect is worth saving. You also need to inform people how they can change their behaviour to help this insect and lots of other insects from becoming extinct.

You need to complete two parts to this project: a written newspaper article persuading people to save the Lord Howe Island Stick Insect and another medium of advertising. You may like to use a skit, a poster, a radio ad, or a television ad.

Resources:

ST3-11LW - Describes some physical conditions of the environment and how these affect the growth and survival of living things

Student Activity:
Students choose an Australian insect to study. Find out what conditions this insect needs to grow and survive in its environment. Write an information report and include a sketch or picture of your insect, as well as its environment.

Mathematics

MA3-18SP - Uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables.

Student Activity:
Have a look at the data records available on the following website (Australian National Insect Collection): [http://collections.ala.org.au/public/show/cof3](http://collections.ala.org.au/public/show/cof3) Choose one of the records. Analyse this record by interpreting and evaluating what it means. Use this information to construct a line-graph of the information included.
INSECTS
STAGE 3 SUGGESTED CLASSROOM ACTIVITIES

Name

1. Insects adapt to their environment in 3 different ways. What are they?

2. Make a list of ten Australian insects

3. Draw two different Australian insects from the table above

4. Briefly research and report on the LORD HOWE ISLAND STICK INSECT

5. Write a list of five endangered insects
Certificate of Achievement

Congratulations

………………………………………………………………………………………………………………..
on completing your studies of
INSECTS
From
“Enquiring Minds”.
You are well on your way to becoming an
INSECT EXPERT

Signed_________________________________________ Dated____________________

Mapped to Australian Curriculum and NSW BOSTEC standards as at March 2014
INSECTS

STAGE 4 & 5 SUGGESTED CLASSROOM ACTIVITIES

Science

SC4-4WS - Identifies questions and problems that can be tested or researched and makes predictions based on scientific knowledge.

SC4-6WS - Follows a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually.

Student Activity:

Students are going to plan a museum dedicated to insects. The teacher explains the history of the Museum which is the setting for the film they have watched. In groups discuss what insects they are going to have and ask them to write a guide to their museum which explains their collection and its importance to science.

Resources:

This website contains an extract from an ABC Catalyst program which outlines the history of the Macleay Museum. Teachers may decide to show the video of the program to the students or just use the transcript to acquire information to present to students.

http://www.abc.net.au/catalyst/stories/2272530.htm

SC4-20LW - Explores the interactions of living things with each other and the environment

SC4-9WS - Presents science ideas, findings and information to a given audience using appropriate scientific language, text types and representations

Student Activity:

Students select an insect from the film and complete a report on it that would help someone to locate and identify it. Their report should include what it looks like, where it lives, whether it lives in groups or swarms, what it eats and any distinctive behaviour

Geography

5. 10 - Applies geographical knowledge, understanding and skills with knowledge of civics to demonstrate informed and active citizenship.

5.3 - Selects and uses appropriate written, oral and graphic forms to communicate geographical information

Student Activity:

In groups students investigate the threats to Australia’s insect biodiversity.

Each group then designs a pamphlet to explain the importance of insects to biodiversity and maintaining ecosystems.