

WithOnePlanet

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Investigate

Lesson 6

Teacher notes

Carbon answers the question

Years

1 to 2



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INQuIRY



Carbon answers the question

Lesson 6: Teacher notes

This document provides the teacher with the details of the lesson.

At a glance

To support students to conduct any additional specific research and investigation in order to answer the class's essential question(s) developed during the *Question* phase of the *INQuIRY* process.

Lesson focus

The *Investigate* phase is designed to provide students with hands-on experiences of the science phenomenon. Students explore ideas, collect evidence, discuss their observations and keep records, such as science journal entries. The *Investigate* phase ensures all students have a shared experience that can be discussed and explained.

In the *Investigate* phase students develop a literacy product to represent their developing understanding. They discuss and identify patterns and relationships within their observations. Students consider the current views of scientists and deepen their own understanding.

Assessment guide

This assessment guide supports teachers in identifying the types of assessment that are appropriate for this lesson.

Formative assessment is an important aspect of the *Investigate* phase. It involves monitoring students' developing understanding and giving feedback that extends their learning. It involves monitoring students' developing understanding of:

- > the concepts involved in answering the essential question(s) developed by the class and the WithOnePlanet *Big ideas* questions.

Summative assessment of the science inquiry skills is another important focus of the *Investigate* phase. Rubrics can be used to gauge the level of student achievement on performance tasks.

It is recommended that the teacher develops a meaningful rubric to capture the students' learning at this point. This lesson also provides opportunities to monitor the development of students' general capabilities.

Key lesson objectives

Science

Students will be able to represent their current understanding as they:

- > develop an overarching understanding of carbon, its presence in living things, its impact on the weather and ways to reduce this impact.

Literacy

Students will be able to:

- > contribute to discussions about the concepts of carbon in living things and its impact on the weather
- > record understandings and ideas using any suitable written media.

Equipment

For the Class

- > *Curly questions about living things – Group worksheet* from Lesson 2.
- > Access to resources provided by the teacher in order to research any remaining ideas/concepts/questions from Lesson 2.

Preparation

- > Review students' responses from the *Curly questions about living things – Group worksheet* in order to identify any concepts/ideas/questions that have not been covered during previous *Investigate* lessons
- > Organise access to resources, as mentioned in the Equipment section above.

Lesson steps

1. Ask students to review the class question(s) developed from the *Curly questions about living things – Group worksheet* and determine whether they think the question(s) has/have been answered. The *Carbon answers the question – Student worksheet* can be used to assist with this step.
2. If the question(s) has not / have not been answered, assist students to use resources available to conduct further research into the remaining concepts and ideas relevant to the question(s). The *Carbon answers the question – Student worksheet* can be used to assist with this step.
3. Once students are satisfied that they have completed their research, facilitate a discussion about possible answers to the class question(s). Summarise students' responses during the discussion and seek to clarify the summary to make sure it clearly represents what students are thinking. If and when consensus is reached about possible answers to the question(s) (or indeed that the question(s) cannot be answered at this point), provide the students with a summary of their collective understandings.
4. Return to the *Agree or Disagree – Group worksheet* from Lesson 1. Ask students to again consider the questions and reconsider their opinions about these questions. Ask students whether or not they would like to change their answers based on their learning throughout the unit.