



Earth Ed

EARTH SCIENCES CENTRE

REMOTE LEARNING EVENTS

EARTH ED REMOTE LEARNING CLASSES TEACHERS GUIDE

Picture Book STEM

(running time: approx. 20 minutes)

There are two STEM options available for this lesson. Please contact us if you have a preference otherwise we will happily make the choice for you!

OPTION A: Design engineering challenge

Students will be introduced to the engineering design process through the context of picture story books and be challenged to work through this process in a design challenge.

Victorian curriculum links:

- Design technologies: [VCDSCD018](#), [VCDSCD019](#), [VCDSCD020](#), [VCDSCD022](#)
- Mathematics: [VCMMG078](#), [VCMMG095](#), [VCMMG115](#)
- Capabilities: [VCPSCSE010](#), [VCDTCD017](#)
- English: [VCELT170](#), [VCELT205](#), [VCELT241](#)

Learning outcomes:

1. Listen to a book for enjoyment
2. Learn the design engineering process
3. Work through the design process to imagine, plan, create, test and refine a product to meet set criteria.

Follow up learning activities:

Students can choose a picture book they have at home, identify a problem and then create a design challenge to solve the problem.



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OPTION B: A scientific inquiry

Students will be introduced to the scientific method of prediction, observation and explanation as they explore different phenomena through the context of picture story books.

Victorian curriculum links:

- Digital Technologies: CDTCD017
- Science: VCSSU045, VCSSU041, VCSSU044
- English: VCELT170, VCELT205, VCELT241

Learning outcomes:

1. Listen to a book for enjoyment
2. Learn the science inquiry method – predict, observe, explain
3. Design a science experiment to explore and explain a scientific concept

Follow up learning activities:

Students can create other robots which would be able to be used for particular purposes or choose another of their favourite books and design their own STEM challenge to create a solution to a problem in the story.

Please contact us if you have any queries:

E: admin@earthed.vic.gov.au

T: 5337 2090

EARTH ED REMOTE LEARNING LESSONS AGREEMENT

Teacher's role:

- The teacher may be asked to nominate students to respond to particular questions during the video conference
- students will be able to note their questions in the chat window for the Presenter to address
- we ask the teachers to monitor chat activity and to ensure that students only enter questions into the chat window
- please ensure that the students are forwarded the necessary files and the link to the meeting prior to the day
- please go over our protocols that are included in this teacher's guide with your students

During the online class:

1. Microphones must remain on mute unless specific question are asked by the presenter to that participant.
2. Using Webex CISCO: if your class has all students' cameras operating and the presenter can see you all, 'Yes' as your answer is hands-on-your-head. 'No' is indicated when you cross your arms. Your presenter will indicate their preference at the start of the video conference.
3. Students will not be sharing their screens.
4. Only use the chat window to type in questions for the presenter. Do not use the chat window to chat to each other.
5. The presenter will address your questions during the video conference or towards the end.
6. Be sure to leave your conference at the end of the session.

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