 To mine or not to mine

Scenario 1

You live in a country town. The town council is holding a meeting to examine whether or not an open-cut mine should be developed just outside the town. Five local community members have prepared talks for the council meeting.

Group work task

Working in groups of 5:

Your group needs to:

1. Brainstorm ideas and arguments to help organise your ideas.
2. Present information about the process of open-cut mining and its impact on the environment.
3. Examine these facts from 5 viewpoints:
* Aboriginal elder (indigenous people)
* Café owner in the town
* Environmentalist
* Mining company representative with a geology background
* Truck driver
1. As a group, prepare a ¼ to ½ page argument for each person to present to council. Two of your people must present some scientific evidence.

Scenario 2

You live in a country town near Kakadu. The town council is holding a meeting to examine whether or not the mining of uranium should be developed in the Kakadu area. Five local community members have prepared talks for the council meeting.

Group work task

Working in groups of 5:

Your group needs to:

1. Brainstorm ideas and arguments to help organise your ideas.
2. Present information about the process of uranium mining and its impact on the environment.
3. Examine these facts from 5 viewpoints:
* Aboriginal elder (indigenous people)
* Café owner in the town
* Environmentalist
* Mining company representative with a geology background
* Truck driver
1. As a group, prepare a ¼ to ½ page argument for each person to present to council. Two of your people must present some scientific evidence.

Scenario 3

You live in a country town. The town council is holding a meeting to examine whether or not the mining of coal should be developed just outside the town. Five local community members have prepared talks for the council meeting.

Group work task

You are to work in groups of 5:

Your group needs to:

1. Brainstorm ideas and arguments to help organise your ideas.
2. Present information about the process of coal mining and its impact on the environment.
3. Examine these facts from 5 viewpoints:
* Aboriginal elder (indigenous people)
* Café owner in the town
* Environmentalist
* Mining company representative with a geology background
* Truck driver
1. As a group, prepare a ¼ to ½ page argument for each person to present to council. Two of your people must present some scientific evidence.

Scenario 4

You live in a country town. The town council is holding a meeting to examine whether or not the mining of opals should be developed just outside the town. Five local community members have prepared talks for the council meeting.

Group work task

You are to work in groups of 5:

Your group needs to:

1. Brainstorm ideas and arguments to help organise your ideas.
2. Present information about the process of opal mining and its impact on the environment.
3. Examine these facts from 5 viewpoints:
* Aboriginal elder (indigenous people)
* Café owner in the town
* Environmentalist
* Mining company representative with a geology background
* Truck driver
1. As a group, prepare a ¼ to ½ page argument for each person to present to council. Two of your people must present some scientific evidence.

Scenario 5

You live in a country town. The town council is holding a meeting to examine whether or not the mining of gold should be developed just outside the town. Five local community members have prepared talks for the council meeting.

Group work task

You are to work in groups of 5:

Your group needs to:

1. Brainstorm ideas and arguments to help organise your ideas.
2. Research facts about the process of gold mining and its impact on the environment.
3. Examine these facts from 5 viewpoints:
* Aboriginal elder (indigenous people)
* Café owner in the town
* Environmentalist
* Mining company representative with a geology background
* Truck driver
1. As a group, prepare a ¼ to ½ page argument for each person to present to council. Two of your people must present some scientific evidence.

Syllabus links

Science K-10 syllabus

Outcome

Explains how advances in scientific understanding of processes that occur within and on the Earth, influence the choices people make about resource use and management. SC4-13ES.

Content

ES3 Scientific knowledge influences the choices people make in regard to the use and management of the Earth's resources.

Students:

f. Outline the choices that need to be made when considering whether to use scientific and technological advances to obtain a resource from Earth's spheres.

ES1 Sedimentary, igneous and metamorphic rocks contain minerals and are formed by processes that occur within Earth over a variety of timescales. (ACSSU153)

Students:

h. Describe examples to show how people use understanding and skills from across the disciplines of science in occupations related to the exploration, mining or processing of minerals in Australia. (ACSHE224, ACSHE227)

[Science (incorporating Science and Technology K-6) K-10 Syllabus](http://syllabus.nesa.nsw.edu.au/science/science-k10/) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2012.