

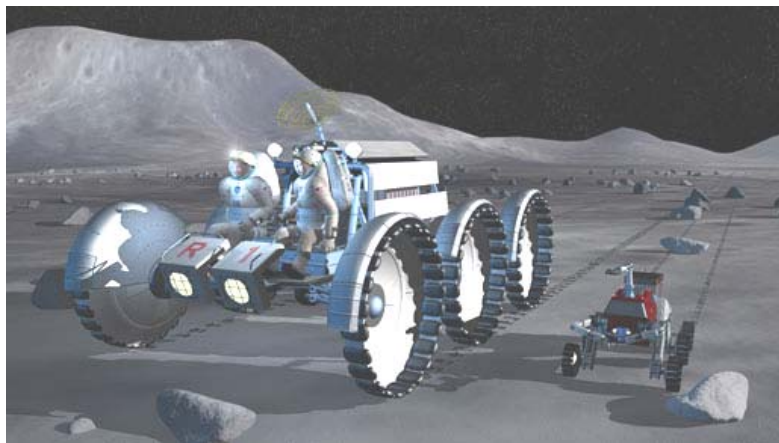
## Activity 5: Life on Mars versus life on Earth

### Background information

In 2004, The United States Government announced plans to return humans to the Moon, and to eventually send humans to Mars. This was quite a change in policy, as NASA's Solar System exploration has only been done by robotic missions since the 1970s.

As you might expect, this plan has many supporters and critics.

In this activity, students will consider this issue from the point of view of a government policy advisor. They will brainstorm and discuss the issue using the six-thinking hats method (developed by Dr Edward de Bono).



CREDIT: NASA

### What you need

- Photocopies of Worksheet: *Six thinking hats*. You may wish to enlarge these to A3 size, so students have more space to write.
- Access to resources for students' own research.

### What to do

1. Begin the session by posing the following scenario:

'NASA and many other international space agencies and governments intend to cooperate to send humans to the Moon to live, conduct experiments and help plan for other missions to Mars and beyond.

Sending humans to the Moon offers a great opportunity for advances in science and technology. However, many argue that the amount of money required for this project would be much better spent on sustainable technology here on Earth, to combat issues such as water shortages, poverty and climate issues.

The Australian Government has been asked to join this group and provide money and research to help send humans to the Moon. It is your group's job to advise the government:

Should we send people to live on the Moon, or should we spend the money on much needed projects on Earth?'

2. Divide the students into groups of four.
3. Ask the groups to write down all the information they need to research to make a decision. They may want to allocate different research topics to different group members.
4. Allow students the time to research the scenario, using library or online resources.
5. With research in hand, gather the students back into their groups.
6. Hand out the worksheets; explain the six-thinking-hats method and what each colour represents.
7. Starting with the white hat, groups should spend the time indicated in Table 1, discussing and writing down notes under each hat on the worksheet. The teacher should keep time, and encourage groups to stay focused on the particular hat.
8. After the students have worked through the six-hats, have each group present their findings (Blue Hat) and their reasoning to the rest of the class.
9. Discuss whether the thinking hats process changed their mind about the topic.

Thinking hat colour	Suggested time
White Hat:	10 min
Red Hat:	5 min
Black Hat:	7 min
Yellow Hat:	7 min
Green Hat:	5 min
Blue Hat:	5 min

**Table 1: Suggested time interval to be spent on brainstorming for each thinking hat colour**

### Worksheet: Six thinking hats

What is your key issue statement or question?

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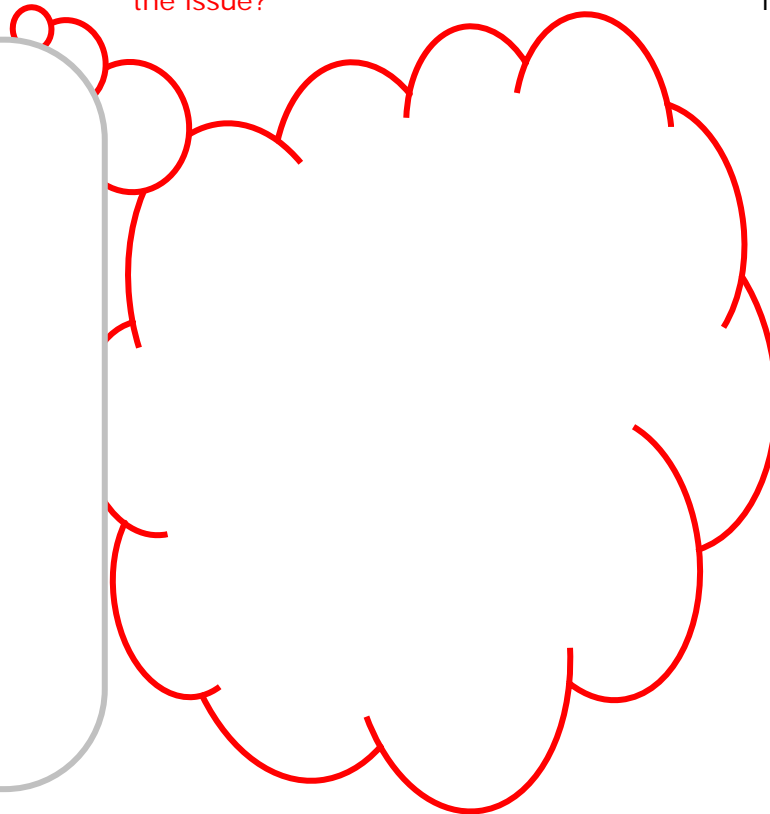
**White hat:**

List the information, facts and figures about the issue.



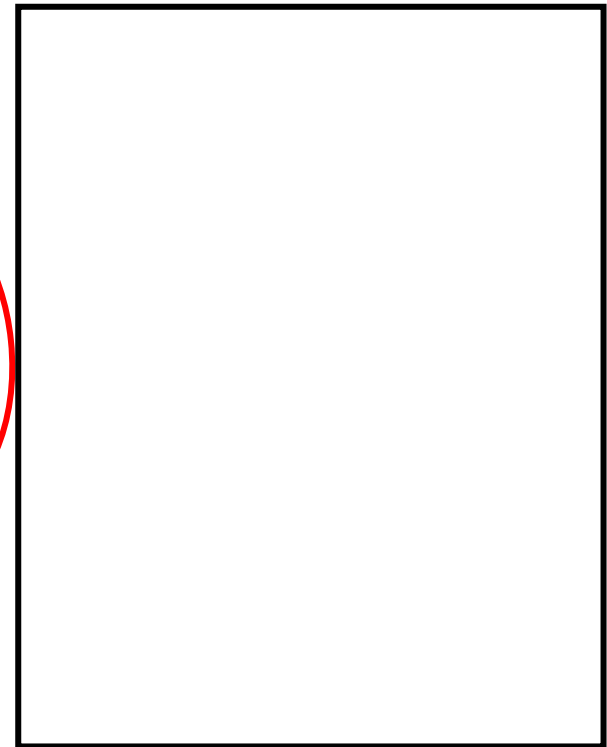
**Red hat:**

What are your opinions and feelings about the issue?



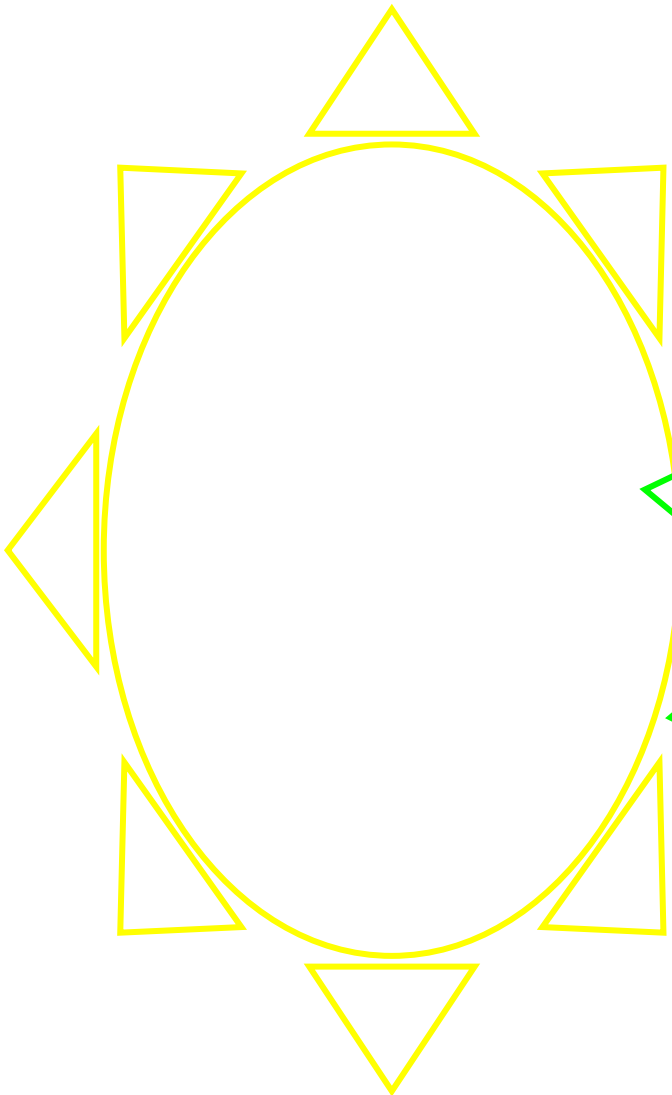
**Black hat:**

What are your criticisms, judgments and negatives about the issue?



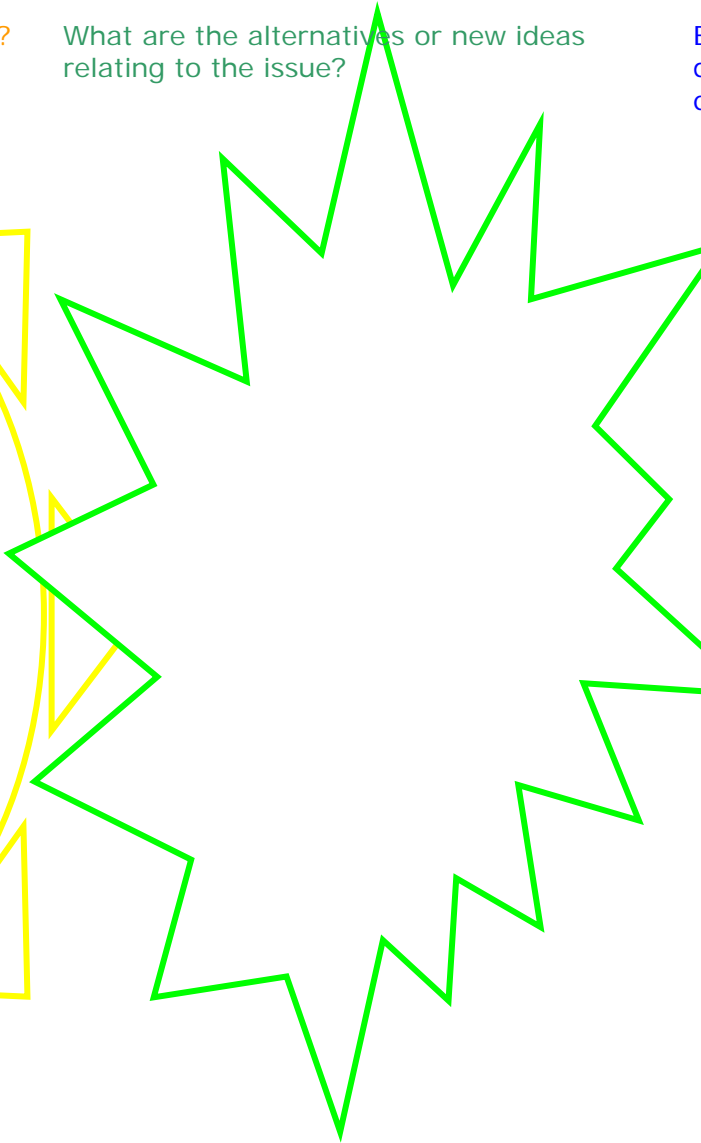
**Yellow hat:**

What are the positive aspects of the issue?



**Green hat:**

What are the alternatives or new ideas relating to the issue?



**Blue hat: Conclusion**

Based on all of the issues and ideas, what do you think is the best response to the question?

