



Space Exploration Debate

- 1. Get students to get into groups based on which one of the following they agree with:
 - In favor of sending both human and robotic missions to space
 - In favor of only sending robotic missions to space
 - Not in favor of space exploration
 - Undecided

Let the students know that they can change groups at anytime during the debate, as many times as they wish.

- 2. Give groups about 5 minutes to talk amongst themselves and decide which points are the most important if they were to convince someone of their opinion.
- 3. Each group gets 2 minutes to state their case (other groups cannot rebuttal until all groups have gone).
- 4. The debate begins! How this goes will depend on the class. The students can just talk amongst themselves (but step in if it gets too off topic, or certain students are dominating the conversation, etc.). Another way is to get the students to put their hands up when they have something to say, and you choose who talks next. It is useful to put a time limit (30-60 seconds) on how long they can talk for. Let the debate go on for as long as time allows, but make sure there are 10-15 minutes at the end of class for a wrap-up.
- 5. Interject information or ask questions as the debate goes on if someone is way off base on something or if there is something important that hadn't been covered yet. Try your best, though, not to influence the students.
- 6. Makes notes of points that were brought up often (typically economics, humans vs. machines, other things (social programs, health research) are more important, etc.)
- 7. Wrap-up the debate by providing information regarding the points that were brought up often (what percentage of American budget goes to NASA; spin-off technologies; collaboration between humans & robots, we need to find somewhere to live when Earth "explodes", etc.). Write down a table with pros and cons of space exploration. Let the students know that this topic is continually under debate among scientists.