

### Activity Guide for Students: Top 10 Countdown

**Purpose:** To review 2017's top science stories or class content from the entire first semester.

#### Procedural overview:

**Activity 1: Match it up!** After reading the "Life finds a way" page, in a group of three play an organism memory matching game. Then create your own game that your classmates can play based on other information from the issue.

**Activity 2: Top 10 semester in review** Start a semester review by creating your own Top 10 list of science experiences from the semester. Describe what was learned in each experience, explain the concept covered and give an application of the learned concept. Be prepared to present your Top 10 science experiences in a timeline or infographic format.

#### Activity 1: Match it up!

##### Instructions:

- 1) Obtain cards from your teacher.
- 2) Shuffle the cards and then set them out face down into five rows of four cards.
- 3) The first player turns over any two cards. If the two cards match — the name card matches the corresponding clue — the player picks up and keeps the pair and then goes again. If the cards don't match, turn them back over in their original positions. A player's turn ends when he or she doesn't make a match.
- 4) Once all the cards have been picked up, the player with the most matching pairs is the winner.

##### Variations:

- To decrease the difficulty of the game, keep the clue cards and name cards separate throughout the game. Shuffle clue cards separately from name cards, and place each set face down in its own pile. Each group of three students should get one stack of name cards and one stack of clue cards. Place all name cards face down in two rows of five cards, and place all clue cards face down in a separate rectangle of two rows of five cards. One clue card should be turned over and one name card should be turned over to see if they match.

If time permits, create another game based on information from this issue. Here are some examples of games you could create, or come up with your own ideas:

- A board game based on rolling dice to work your way toward solar system destinations visited by the robotic probes listed on the "Mission debriefing" page.
- A Jeopardy!-style game based on facts from the 10 articles.
- A Monopoly-style game where you compete to gather technologies from this issue to rule the world.
- A bingo game based on vocabulary from the Top 10 articles.

After you have finished creating a game, swap games with another group. Give each other feedback for game improvement.

### **Activity 2: Top 10 semester in review**

Work in groups to review what you have learned this semester. Look back over your *Science News* readings, textbook chapters, notes, labs and other related assignments. Based on that information, create your own Top 10 list of science experiences you had this semester. For each of the 10 experiences, what did you learn? Explain the concept and give an application of it. Create an infographic or timeline of your Top 10, then present it to the rest of the class.