# **GREAT MINDS THINK ALIKE**

In this cooperative word game, everyone is on the same team...but each player must be original for the group to win!

#### **LET'S PLAY!**

- Gather 4–8 players into a circle facing one another.
- Each player gets a stack of paper (quarter sheets) or a whiteboard, and a marker.
- The facilitator holds onto the deck of Solar System trading cards.
- Pick a guesser for the first round from among the players. The "guesser" closes their eyes, picks a card from the deck, and shows it to the other players without looking.
- All players except the guesser write a one-word clue for the object on the card onto their paper or whiteboard. Players may not communicate with one another about the clue they are giving.
- Next, while the guesser's eyes remain closed, the other players show one another their clue word by holding up their paper or whiteboard. All identical clues cancel out, and must be discarded or erased!
- Then the guesser opens their eyes to view the remaining clues. They have one guess to determine the object on the card in question. If they guess correctly, the whole group wins! If they guess incorrectly, the round has been lost.
- Pick a new guesser and move on to the next round.
- The game ends when the deck is gone, or once all players have had their turn as a guesser.

#### Discuss as a group:

What strategies did you use to decide on which clue to write down? As a guesser, what gave you the best chance of correctly identifying the card? Did this exercise help you to learn or remember any science content? What clues were memorable? What is the role of popular culture references in making science relevant and interesting?

### **Training goals:**

- Practice creating multiple points of access to a concept or activity
- Work on developing shared points of reference with learners
- Simplify and scaffold concepts, without losing accuracy
- Work together as a team with other educators and learners

Time to implement: 25 minutes-1 hour

Ideal number of participants: 4–8 players per group



## **Materials**

- Solar System and Beyond trading card set (15 cards)
- Blank card templates
- Paper or Small Whiteboards
- Markers (Dry-erase if using the boards)
- 1 minute timer (optional)

# **Before You Play**

10–15 minutes

Although all trainees have likely learned about our solar system at one time or another, depth of knowledge may vary. You can choose to offer a brief content refresher to get everyone on the same page before playing. See the Training Games Overview for a list of suggested resources you can use to review the objects found on the cards.

You may choose to invite participants to add in cards featuring solar system objects using the blank card template. Participants should each add one or two cards to the deck. Offer assistance to anyone having trouble coming up with an Earth or space object not already in the deck. Refer back to the Training Games Overview for a list of additional objects.

### **Game Rules**

up to 30 minutes

**OBJECTIVE** Together, get one of the players (the "guesser") to guess the object on a card by providing a number of one-word clues.

Individual players choose their clue without coordinating with one another. Identical clues cancel out, and will not be seen by the guesser, so players must try to be original!

**SET-UP** Divide players into groups of 4–8. Each group needs a deck of Solar System trading cards (for a less challenging game, consider removing the "Our Solar System" and "Beyond Our Solar System" cards).

Each group of players sits in a circle, so that everyone in the group can see each other's faces. Each player needs a stack of paper (quarter sheets) and a marker. Place the deck of Solar System cards in the center of the circle.

**PLAY!** The first guesser draws a card from the deck and shows it to the group without looking at the card.

Without communicating or showing their work to one another, every player but the guesser writes a clue on their piece of paper or whiteboard. The clue must be composed of a single word. Numbers, acronyms, onomatopoeia, and symbols or special characters are acceptable, but count as the one word.

Invalid clues include any word that appears in the title of the card; the word, but spelled creatively (e.g. "Urth" in place of "Earth"); invented words (e.g. "hunkarock" for "asteroid"); translations (e.g. "la Tierra" for "Earth"); and homonyms (e.g. "son" for "Sun").



Once all players have written their clue word, the guesser closes their eyes or leaves the room. While the guesser isn't looking, the other players reveal their words to one another by holding up their paper so that the clues are visible for comparison.

All identical clues cancel out, and must be discarded face-down! Identical clues include: Two or more identical words among players; variants of the same word like plurals, gender differentiations, different languages, and spelling mistakes don't count as actual differences (e.g. God and Goddess).

If all clues cancel each other, that round has been lost. The card should be placed face down next to the deck.

If one or more non-identical clues remain once all identical (or invalid!) clues have been discarded, players should keep them raised. When signaled, the guesser opens their eyes to see the remaining clues. They then have one guess to determine the object or system on the card in question.

If the guesser accurately guesses the card, it should be placed face up next to the deck. If they guess incorrectly, the card should be placed face down next to the deck. Either way, the guesser role moves to the next person in the circle, a new card is drawn, and the next round begins!

The game ends when the deck is gone. Together, the team can count their collective successes (face-up cards) and misses (face-down cards).

Depending on time constraints and enthusiasm, the team can then choose to play again with the goal of achieving more correct guesses...

# **Debrief Discussion & Key Takeaways**

10 minutes

Once the game is over, come back together to discuss participants' experiences and observations. Consider together how this training exercise could help to inform facilitation and learner engagement strategies for Explore Science: Earth and Space toolkit activities.

- What clues or aspects of this game were memorable?
- What types of thought processes did you go through when selecting your one-word clues?
- As a guesser, what gave you the best chance of correctly identifying the card?
- Do you think there is a place for popular culture references in science communication and STEM activity facilitation? Have you ever tried connecting content to something that already holds relevance or interest for the learner? How can you draw on popular culture or shared imagery without promoting misconceptions or making assumptions about participants' cultural knowledge or familiarity?
- What strategies helped the team succeed? How could these same strategies be applied toward facilitating the Explore Science: Earth & Space activities with museum visitors?



## **Key Takeaways:**

As a learner, it's important to have access to as many points of entry as possible when exploring new concepts!

Facilitators can work to make science content relevant to learners. It helps to anticipate or determine where learners are coming from, and think creatively to build upon and broaden their understanding. This can mean coming up with multiple ways to describe a word or concept. Try to make connections to everyday life, popular culture, or other common cultural frameworks. When possible, create shared definitions and shorthands to refer back to over the course of an activity.

In response to the question "What clues or aspects of this game were memorable?", trainees will likely highlight funny moments or interesting facts. You can point out that people often remember new STEM content and concepts in the context of interactions with facilitators and other learners, like those promoted by the educator-facilitated learning opportunities included in the Explore Science: Earth & Space Toolkit.

# **Facilitation Notes & Possible Adaptations**

If possible, provide each player with a small whiteboard and a dry-erase marker to minimize paper waste.

If players are taking a long time to come up with clues, consider imposing a one minute time limit! You may also require guessers to make their guess within a minute.

This is a cooperative game in which all players work together to achieve the best outcome. It plays best with 4–8 players in a group. The more players present, the more challenging the game can become, since it requires each individual to anticipate their teammates' thought processes and act uniquely!

The game can be adapted for 3 players. Simply allow each non-guesser player to deliver two clue words rather than just one.

It can also be adapted for a shorter window of time. Rather than going through the whole deck, you may choose to play just long enough for each participant to guess once.



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