

Earth Images BINGO

The purpose of this activity is to introduce students to different views of Earth and to help students prepare for interpreting ISS EarthKAM and other Earth images. To do this, they play the game BINGO, with boards that are made of images of Earth features from three different views: satellite view (space view), airplane view (aerial view), and ground view.

Materials/Resources:

- Make color printouts of the Earth Image BINGO Boards. There are ten different boards, so if there are more than ten players, there may be more than one winner at a time.
- Gather cover pieces (~20 per player), such as pieces of paper, paper-clips, or candy.
- Prepare the calling pieces. Simply cut up the sheet Calling Pieces and put all the slips in a hat or other container, or if you want to make a show of it, prepare an interesting cage and calling pieces. (See Figure 2: Hand Made BINGO Machine.)
- Optional: Gather some everyday objects, such as mugs, soda cans, apples, water bottles, or baseball caps, for your students to draw.

Time: 1+ (50 minute) periods

Level: Easy

Recommended Procedures:

1. Have students practice looking at objects or land features from a number of different views before playing.
 - Have students observe and draw an object from the three views: straight above (satellite/space), an angle above (airplane/aerial), and the side (ground).
 - Have them imagine and draw what Earth features, such as a building or tree, might look like from the different views.
2. Introduce the activity.
 - Earth Image BINGO is similar to ordinary BINGO. The goal is to be the first player to cover five spaces in a row—horizontally, vertically, or diagonally.
3. Have the caller—yourself or a student—pull a calling piece out of the container and read it out loud.

STANDARDS

Science

Science as Inquiry

- Abilities necessary to do scientific inquiry.

Geography

The World in Spatial Terms

- Standard 1: How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective

OUTREACH

This Earth Images BINGO game is a good way to share a piece of the ISS EarthKAM experience with students, including elementary school students, in a brief, fun manner.



4. Have all the players find and cover that view on their BINGO board.
(See Figure 1: Sample Board.)
 - Encourage your students to help each other find each view.
5. Continue until one or more players calls out “BINGO”.
 - You can then restart, with players removing all pieces from their boards, or keep playing until everyone has a BINGO.

Figure 1: Sample Board

Each Earth Images BINGO board contains all 24 views in different arrangements. The 24 views are derived from eight common features: airports, beaches, cities, dams, farm fields, forests, mountains, and stadiums. Each of these features is shown from satellite (space), aerial (airplane), and ground. The 25th square is a “free space.”



Beach - air	Beach - ground	Mountains - air	Airport - air	Forest - ground
Dam - air	Farm fields - space	Airport - space	Mountains - space	Stadium - air
Stadium - ground	Stadium - space	Free Space	Dam - space	City - air
Airport - ground	Forest - air	Farm fields - ground	City - space	Beach - space
Mountains - ground	Farm fields - air	City - ground	Dam - ground	Forest - space



Figure 2: Hand Made BINGO Machine

Ping pong balls, each labeled with one of the 24 views, in a BINGO cage made from a pet exercise wheel. Be creative and make an interesting setup of your own.

Calling Pieces

Airport Ground	Airport Aerial/Air	Airport Satellite/Space
Beach Ground	Beach Aerial/Air	Beach Satellite/Space
City Ground	City Aerial/Air	City Satellite/Space
Dam Ground	Dam Aerial/Air	Dam Satellite/Space
Farm Fields Ground	Farm Fields Aerial/Air	Farm Fields Satellite/Space
Forest Ground	Forest Aerial/Air	Forest Satellite/Space
Mountain Ground	Mountain Aerial/Air	Mountain Satellite/Space
Stadium Ground	Stadium Aerial/Air	Stadium Satellite/Space