

## ISS Activity #8

### What you need for this activity:

- The ISS-ABOVE connected and working
- Access to the internet.
- A world map.
- Activity #8 Worksheet.

### Topic: Views of the Earth and the ISS



If you've been keeping an eye on your ISS-ABOVE, you've probably seen some stunning images of the Earth, sunrises and sunsets, shots with parts of the ISS in view, maybe even the robotic Canada arm, moving into position, or a Soyuz module docking or undocking.

Every few seconds, the location that is directly below the ISS with display in the bottom left corner of the screen (see below).



Soyuz docking stations).



Make sure you can tell the difference between the forward-facing camera shots, the down-facing views and the rear-facing video (this is the one where you see the

Given that  $\frac{2}{3}$ rd's of the Earth is covered with oceans, you'll see a lot of water and a lot of clouds, but you'll also get great views of land and coastlines.

Apart from video from HDEV (the High-Definition Earth Viewing experiment) which shows on your ISS-ABOVE, there are other cameras on the outside of the ISS and astronauts take photos from the cupola (see right), either for their own interest, or because of specific requests from scientists and researchers.



## Activity 8 Worksheet:

### Part 1: Where is the ISS?

The HDEV doesn't capture video at night, so the images are useful for identifying terrain and weather patterns, snow and ice.

Below is an image the HDEV wouldn't capture: a nighttime view of the Earth.



Write down everything you notice about this photo:

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What part of the world is this a picture of (HINT: it's upside down from how you'd normally see it and it's not in the US).

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**Part 2: Images of the Earth online**

Google **Images of the earth from the space station**



Take a look at the full-screen images (most are high-resolution and very detailed). See what you can identify from a few of these photos.

**Part 3: Using your ISS-ABOVE to look at the Earth**

Use your ISS-ABOVE to view live video from the HDEV. This is what it looks like traveling 5 miles per second 250 miles up.

Is it cloudy? Are you over oceans? Can you see land? Are there interesting cloud types? Take your time and look very closely at the images and see what you can identify.

Your notes:

Where was the ISS over during your observation? .....

What did you see? .....

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