

Critical Thinking Skills

Space Travel & Technology

Skills For Critical Thinking		Reading Comprehension							Hands-on Activities
		Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	
LEVEL 1 Knowledge	<ul style="list-style-type: none"> List Details/Facts Recall Information Match Vocab. to Definitions Define Vocabulary Label Diagrams Recognize Validity (T/F) 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 2 Comprehension	<ul style="list-style-type: none"> Demonstrate Understanding Explain Scientific Causation Rephrasing Vocab. Meaning Describe Classify into Scientific Groups 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 3 Application	<ul style="list-style-type: none"> Application to Own Life Model Scientific Process Organize and Classify Facts Utilize Alternative Research Tools 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 4 Analysis	<ul style="list-style-type: none"> Distinguish Roles/Meanings Make Inferences Draw Conclusions Based on Facts Provided Classify Based on Facts Researched 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 5 Synthesis	<ul style="list-style-type: none"> Compile Research Information Design and Application Create and Construct Imagine Self in Scientific Role 	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 6 Evaluation	<ul style="list-style-type: none"> State and Defend an Opinion Justify Choices for Research Topics Defend Selections and Reasoning 	✓	✓	✓	✓	✓	✓	✓	✓

Based on Bloom's Taxonomy

NAME: _____



Living in Space



1. You've probably already wondered what it would be like to live in space. In your response notebook, pose five "I wonder" statements about life on a space station. For example, "I wonder what kind of food astronauts eat".
2. Complete each sentence with a word from the list. Use a dictionary to help you.

crew
expensive

disintegrate
monitor

assemble
experiment

launch

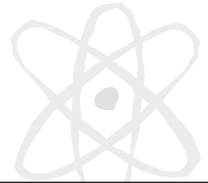
- a) The baseball hat we wanted was far too _____ for what he was willing to spend.
- b) Her parents did not realize that they would have to _____ all the parts of the remote controlled car themselves.
- c) The doctor told the nurse to take the patient's temperature, change his bandages and continue to _____ his breathing.
- d) Each student in the class had to design their own _____ to show the effect that sunlight and water have on the rate of plant growth.
- e) The designer decided to save his new handbag for the spring _____ of his new line.
- f) When they got to the site of the wreck, they knew it would take a whole _____ of trained people to clean up the mess.
- g) The walls of the riverbank seemed to _____ right before her very eyes as the waters rushed in.

3. Unscramble the words below. These are the words given in the list for question 2. When you unscramble it, write the letter of the sentence from question 2 beside it.

- a) _____ HULNAC
- b) _____ ROTNMIO
- c) _____ EMLSBAES
- d) _____ GEDSTTIIRANE
- e) _____ VSNEEEPXI



Living in Space



at the end of each day to report the work that was completed. Also, it is important that the astronauts exercise on a treadmill or exercise bike (strapped in, of course!) for at least two hours each day. If they didn't their muscles, bones, lungs and heart would be so weak from living in microgravity that they wouldn't be able to stand up when they got back on Earth.

Plus, everything seems to take longer in space. Water also 'floats' in space, so simple things like taking a shower and brushing your teeth are more difficult. The water would be everywhere! Instead, most astronauts sponge off to keep clean. They shave with an electric razor, using a **suction fan** to collect the hairs. The toilets don't have water or gravity to pull the waste down, so suction fans are needed there, too. Imagine sleeping in space. Astronauts need to strap themselves into sleeping bags to keep them from crashing into controls.

ISS astronauts report that modern space food is surprisingly good. Rather than the old 'food in a tube', **microbe-blocking** bags are used to store meals including pizza and cheesecake. The food containers are set in a compartmentalized tray and strapped to the astronaut's knees to keep the food from floating away. Imagine trying to eat peas! Fresh supplies are brought in once a month by space shuttle. Packaged waste can be taken away, or it is dropped toward Earth where it explodes and **disintegrates** upon reaching the atmosphere. Everything has its place on the ISS, and there's no room for waste.



Image courtesy of NASA



Living in Space



1. Write each word beside its meaning.

expensive	engineer	assemble	disintegrate	microbe
launch	monitor	compartment	experiment	suction

- _____ a) to separate into parts or fragments; to break up
- _____ b) to fit together or put parts together
- _____ c) costly; high-priced
- _____ d) a test done to demonstrate or discover something
- _____ e) to watch or to check on
- _____ f) to hurl or send forth with some force
- _____ g) a microorganism, especially one causing disease
- _____ h) a separate section or category
- _____ i) a sucking pressure
- _____ j) one who operates technical equipment

2. a) ~~Cross out~~ the names of the countries that were not partners in the ISS project.

Canada Brazil China Russia Japan Australia

b) Circle the words that were not used in this section.

weightlessness exercise swimming shaving orbits toothbrush

c) Underline the words that are names of space stations or parts of space stations.

Zvezda Mir Polyakov Salyut Canadahand