

LEVEL 18 WORKBOOK



STEP 1 SLIDE 3:

Complete the sentences:

1. After World War I many German rocket scientists _____.
2. The Space Race _____.
3. Sputnik I _____.

STEP 1 SLIDE 5:

Write what Pam and Ruth say, then practice making the conversation.

Brian: The Space Race changed the world forever, didn't it?

Ruth: _____.

Brian: At first it was like a war, without killing people. The Soviet Union wanted to show the world that they were the best, and that the Communist system was best for the people, and produced the best scientists. The Americans wanted to show the Soviets that they were the best. Because of the space race, amazing things were done.

Pam: _____.

Raymond: During the space race, the scientists learned how to put a satellite in orbit. Without the satellites, you wouldn't be able to watch many of the television shows, and your cell phone wouldn't work.

Ruth: _____.

Brian: Yes, most countries are using satellites for their telephone systems, as well as for cell phones. Without satellites, the Internet couldn't exist.

Pam: _____.

Raymond: Because vehicles for space needed to be small and light, computers were changed to meet this need. Now, almost everything you use at home has a tiny microchip inside it to control how it works. This came from Space Race research.

STEP 1 SLIDE 6:

During the Space Race the scientists learned to make everything small and light, so that they could carry their equipment in the spacecraft. We now have tiny chips in many of our household appliances. Can you name ten things that you find in most households that contain chips? (HINT: Often the chips are in the clocks.)

1. _____
2. _____
3. _____
4. _____

STEP 1 SLIDE 6 Continued:

5. _____ 6. _____
7. _____ 8. _____
9. _____ 10. _____



Photo courtesy of NASA.

STEP 1 SLIDE 7:

Join the two sentences to make one sentence, using “because”.

1. The world was surprised when the Russians launched Sputnik I. No one knew they could do it.

2. Many German scientists moved to U.S.A. The Americans paid their scientists well.

3. The Soviet Union put a lot of money into their space program. Their leaders wanted to prove that Communism was the best.

STEP 1 SLIDE 8:

Join the two sentences to make one sentence, using “but”.

1. The Americans knew a lot about rockets. The Russians surprised them.

2. Laika was a dog found on the streets of Moscow. Laika was the first animal in space.

3. Sputnik I didn't carry any bombs. Sputnik I made many people afraid.



Earth seen from space. Photo courtesy of NASA.

Step 1 crossword Puzzle:

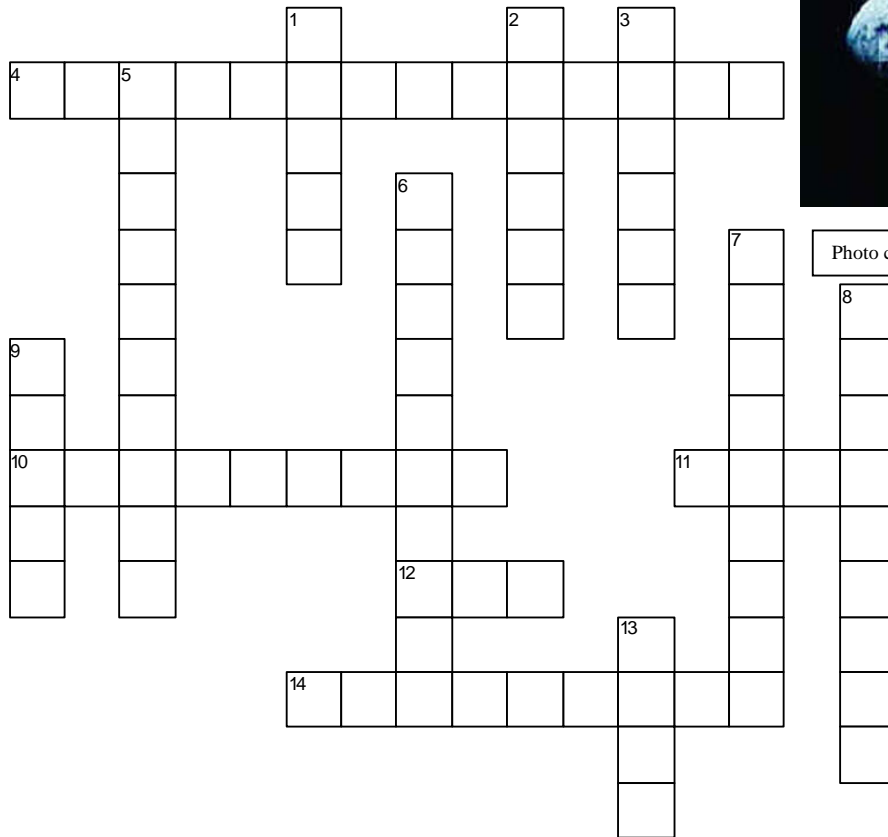


Photo courtesy of NASA

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ACROSS

- 4** between planets
- 10** very smart
- 11** it's funny
- 12** time
- 14** it goes around a planet

DOWN

- 1** where the stars are
- 2** one who goes first
- 3** you take pictures with it
- 5** you watch it
- 6** they run a country
- 7** for heating food
- 8** studies science
- 9** to go around
- 13** very small

STEP 2 SLIDE 3:

Make a conversation. Ruth and Pam are telling you about the Space Race. Write your responses.

Ruth: We were reading about the Space Race on the internet. For a while in 1957 people were worried about what the military leaders in the Soviet Union would do.



You: _____

Pam: Everyone was afraid that they would be able to use rockets to send nuclear bombs anywhere in the world. If they could send something into orbit, they could also bomb cities



You: _____

Ruth: No, they weren't very far behind. They launched Explorer 1 just about four months later. Both countries wanted to be able to put a person on the moon. This would show the world who was the best. Would you want to go to the moon?



You: _____

STEP 2 SLIDE 5:

Answer in sentences:

1. Both countries spent huge amounts of money on the Space Race. Do you think it was a good idea to spend the money that way? (Give the reasons for your answer.)

2. What were the governments really interested in with their space programs?

3. Both the USA and the Soviet Union were sending spacecraft into orbit. Why do you think they didn't work together?

STEP 2 SLIDE 6:

Use the words to make good sentences:

1. up, Soviet, was, but, the, Union, Americans, ahead,
The, caught.

2. times, earth, around, Shepard, flew, the, three, Alan.

3. the, Yuri, in, a, great, Union, hero, Soviet, became, Gagarin

4. many, for, Space, brought, Research, Race, benefits, the.

5. war, for, use, The, space, wanted, leaders, weapons, to, military, of.

6. accidents, there, dangerous, many, flights, were, because, were, Space.

7. a, Could, such, rocket, living, survive, flight, creatures?



Earth and the moon.
Photo courtesy of NASA.

STEP 2 SLIDE 7: Match the meaning:

astronaut	_____	orbit	_____
to launch	_____	moon	_____
government	_____	era	_____
scientist	_____	interplanetary	_____
brilliant	_____	research	_____

USE THESE WORDS:

very smart

between planets

a person who studies science

people who run a country

to learn about something

space traveler

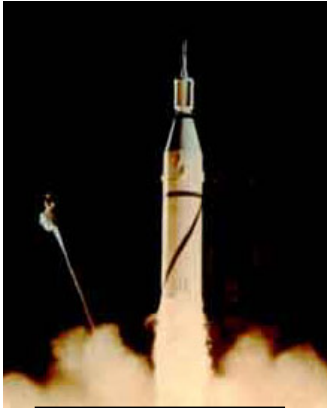
time

to go around

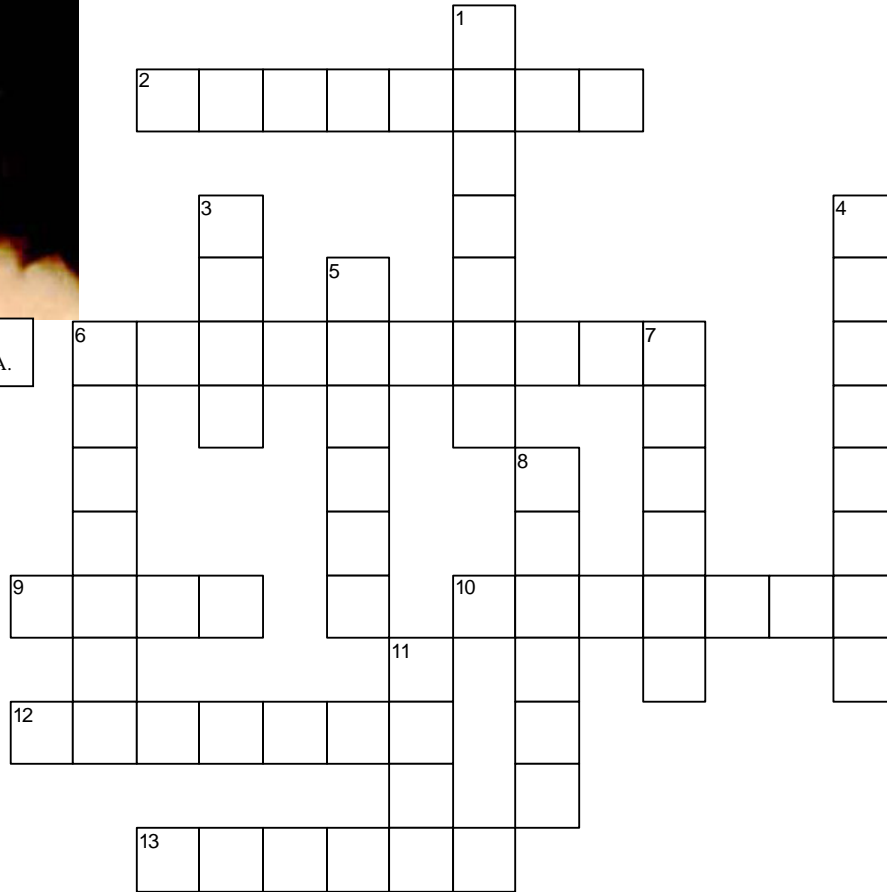
earth's natural satellite

to make fly

Level 18 Step 2 Crossword Puzzle:



Launch of Explorer 1.
Photo courtesy of NASA.



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ACROSS

- 2 to get things in order
- 6 what astronauts ride in
- 9 to make dead
- 10 a thousand millions
- 12 something people ride in
- 13 where bad people go

DOWN

- 1 the story of what has gone before
- 3 what people try to reach
- 4 something bad and unexpected
- 5 people fight with it
- 6 to live through a bad time
- 7 it has a hard shell
- 8 a serious situation
- 11 someone who does something wonderful

STEP 3 SLIDE 3:

Complete the sentences, using one of the suggested answers:



1. “Following in his father’s footsteps” means:

A _____

B _____

C _____

2. “Footprints on the sands of time” means:

A _____

B _____

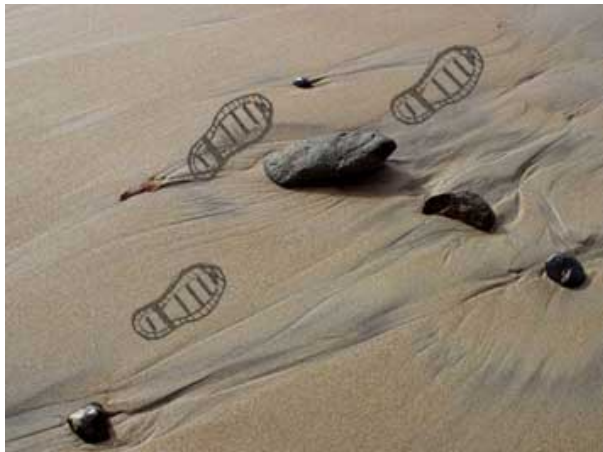
C _____

3. “One giant leap for mankind” means:

A _____

B _____

C _____



STEP 3 SLIDE 5:

Complete the sentences with the correct tense of “get”.

1. The astronauts _____ busy learning how to walk in a space suit.
2. The astronauts thought that they _____ hungry if they didn’t eat.
3. The spacecraft _____ ready to blast off.
4. They _____ safely back to earth after their long flight.
5. Some companies _____ rich building space craft.
6. Armstrong had a bag of rocks that _____ heavy.

STEP 3 SLIDE 7:

**Make a conversation. You are talking about landing on the moon.
Write your responses below:**

Raymond: Wouldn't it be strange if the astronauts found amazing wild animals living on the moon? They'd be very different from Earth animals!

You: _____

Brian: No, nothing could live there. It's terribly hot in the daytime and very cold at night. Also, there is no air to breathe. It's just not a good place for animals!

You: _____

Raymond: In the spacecraft they had lots of good air to breathe. They had ways of changing the air, to be sure they had lots of oxygen. Outside the spacecraft, on the surface of the moon, they had to wear big space suits, and carry their air in steel bottles on their backs. Do you think it was heavy to carry?

You: _____

STEP 3 SLIDE 8:

1. Why is this footprint so important in the history of mankind?



Photo courtesy of NASA

2. What did Neil Armstrong call that first step on the moon?

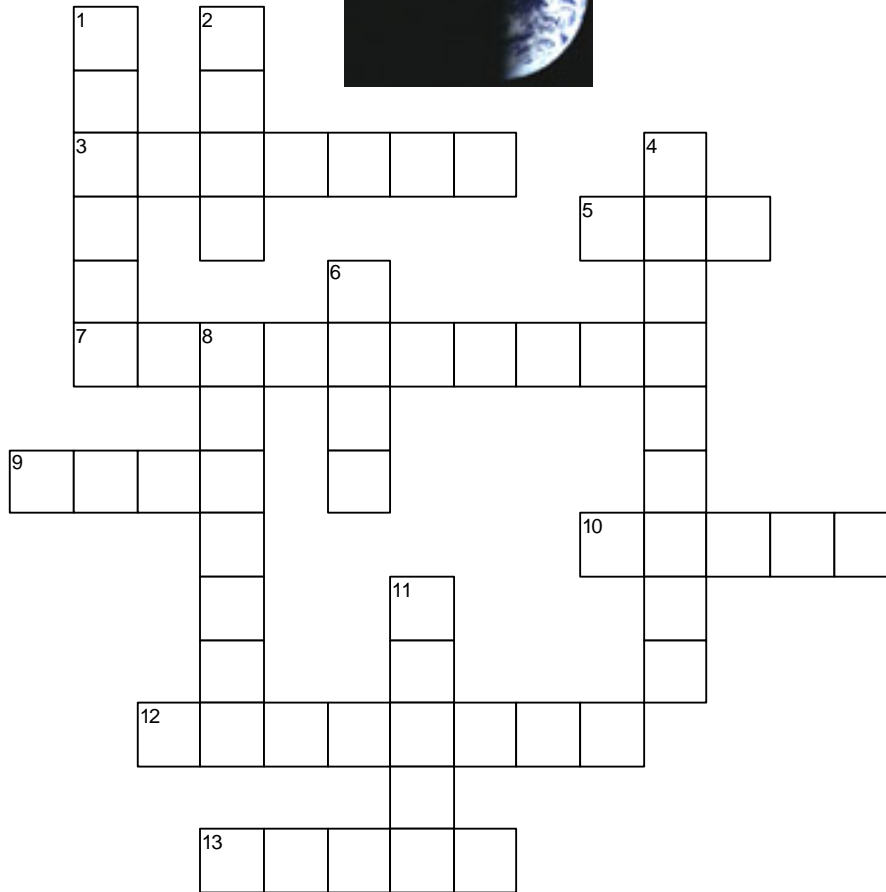
3. Was the Apollo 11 mission to the moon a manned flight?

4. Did Neil Armstrong and Edwin Aldrin take any pictures while they were on the moon?

5. What did they collect on the surface of the moon?

6. Did many people work in the space industry in the United States?

Step 3 Crossword Puzzle:



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ACROSS

- 3 all people
- 5 jump
- 7 astronauts travel in it
- 9 fine dirt
- 10 very big
- 12 left behind
- 13 frightening

DOWN

- 1 well known
- 2 small
- 4 the place where your foot was
- 6 jump
- 8 try
- 11 to do with the moon

STEP 4 SLIDE 4:

Join these sentences to make one sentence, using “too”.

1. Pioneer 11 went close to Jupiter. Pioneer 11 went close to Saturn.

2. _____
I don't want to go to the moon. The moon is far away.

3. _____
Animals can't live on the moon. The moon is very hot in the day time.

4. _____
Lots of men go into space. There are women astronauts.



STEP 4 SLIDE 5:

Make a conversation. You are talking about other forms of life in the universe.

Ruth: There are lots of science fiction books that have terrible aliens living on other planets. Do you think we'll find other creatures in space?

You: _____

Pam: There might be some very strange forms of life in the universe, we don't know. People could hardly believe their eyes when they saw a giraffe for the first time.

You: _____

Ruth: Yes, but we have some forms of life that live at the bottom of the ocean. They live very well under terrible conditions. They have lived there for hundreds of years.

You: _____

Pam: I wouldn't be sure of that! In some science fiction books there are aliens from other planets living right here, but we don't know about them.

You: _____

STEP 4 SLIDE 6:

Answer the questions in sentences:

1. Do you think that there are other forms of life in the universe?

2. Did the Apollo missions discover any life on the moon?

3. Why didn't the Apollo 13 mission land on the moon?

4. Did Explorer 10 land on the moon?

5. Did the scientists find out anything about how the moon was formed from the lunar landings?

6. Is Pioneer 10 still flying away from the earth?

7. Is Pioneer 11 still sending messages back to Earth?



STEP 4 SLIDE 8:

Fill in the blanks, using the words below.

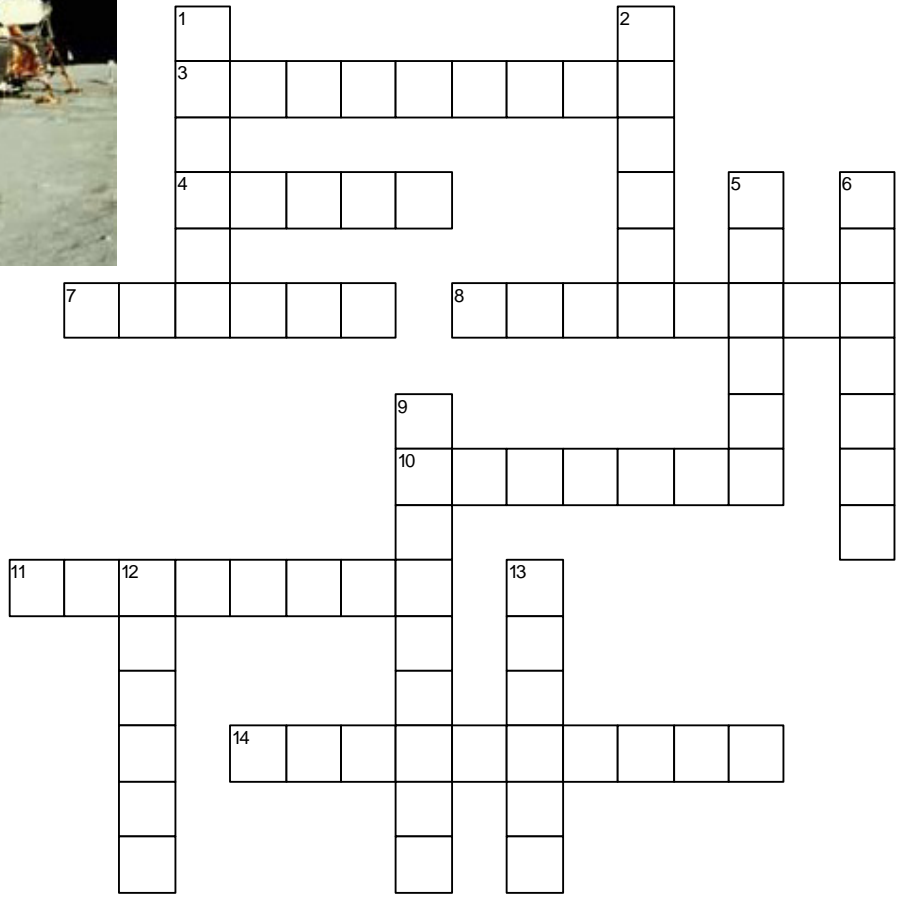
_____ the beginning of _____, mankind has looked up and watched the _____. Many years _____ the Greeks held their first Olympic games when Venus was in a certain place in the _____. That was every four _____.

When we got _____ rockets, scientists could _____ the moon, space, and some of the _____. Now we know what the _____ is like on the planets. The _____ that the _____ brought back from the _____ told the _____ a lot about the early days of the _____.

From all of the space _____ we now know a lot more about our world.

scientists	astronauts	planets	powerful	ago	stars
years	atmosphere	time	sky	universe	Since
rocks	exploration	explore	moon		

Step 4 Crossword Puzzle:



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ACROSS

- 3** something good
- 4** not human
- 7** you breathe it
- 8** something very bad
- 10** to find out all about it
- 11** all of the stars and planets
- 14** the air around us

DOWN

- 1** a huge group of stars and planets
- 2** a ring of gas in space
- 5** you put liquid in it
- 6** it has a long neck
- 9** you can see distant things
- 12** blow
- 13** a small piece

STEP 5 SLIDE 4:

**Answer the questions true or false, by writing T or F in your workbook.
If you choose F, write in the correct answer.**

1. The space shuttle has three parts.

T or F _____

2. The external fuel tank can be used again and again.

T or F _____

3. The solid rocket boosters burn for nearly ten minutes.

T or F _____

4. The crew rides in the solid rocket boosters.

T or F _____

5. The space shuttle can carry people, equipment and tools into Earth orbit.

T or F _____

6. The orbiter can only be used once.

T or F _____

7. The solid rocket boosters explode and burn up in the air.

T or F _____

STEP 5 SLIDE 5:

1. that could They be over over built a spacecraft used and.

2. _____
in Earth The orbiter the returns to crew.

3. _____
sea the solid rocket fall boosters The into.

4. _____
carrying bay tools a equipment huge There cargo for and is.

5. _____
colored is huge fuel The tank rust external.

6. _____
Earth 45 shuttle minutes above the is over kilometers two In.

7. _____
on five crew usually flight to seven are members There each.

STEP 5 SLIDE 8:

Make a conversation. You are talking about things that you could do with the Canadarm.



Brian: Just think of all the things you could do with the Canadarm!

You: _____



Raymond: It's much too expensive to use on construction. We have lots of good equipment for lifting building materials.

You: _____



Raymond: You couldn't rescue people from fires with it either. It would be too difficult to carry the arm to the fire.

Brian: It was made to be used in space, at zero gravity. If you tried to lift anything heavy with it here on Earth, it would likely break.

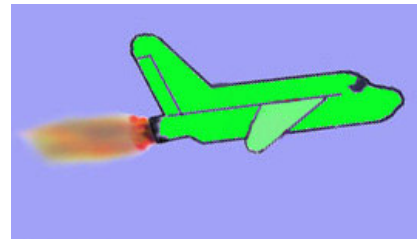
You: _____



STEP 5 SLIDE 9:

Match the Meaning
Write in the correct meaning beside the words:

- | | | | |
|------------|-------|------------|-------|
| astronauts | _____ | elbow | _____ |
| to repair | _____ | satellites | _____ |
| spacecraft | _____ | tools | _____ |
| rust | _____ | external | _____ |
| fuel tank | _____ | cargo bay | _____ |
| crane | _____ | | |



Step 5 Crossword Puzzle:



Canadarm working in space.
Photo courtesy of NASA.

A crossword puzzle grid with 15 numbered starting points for words. The grid consists of white squares for letters and black squares for empty space. The numbers are: 1 (Down), 2 (Across), 3 (Across), 4 (Down), 5 (Down), 6 (Across), 7 (Across), 8 (Across), 9 (Down), 10 (Across), 11 (Across), 12 (Down), 13 (Down), 14 (Across), 15 (Across), and 16 (Across).

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ACROSS

- 2 where the water is
- 6 things you work with
- 8 blow up
- 10 it lifts things
- 11 brown color
- 14 they orbit the earth
- 16 they go into space

DOWN

- 1 making machines that work like people
- 3 outside
- 4 very big
- 5 what trucks carry
- 7 astronauts ride in it
- 9 nothing
- 11 to stay
- 12 where an arm bends
- 13 fix
- 15 people who work or play together

STEP 6 SLIDE 4:

Make a conversation.



You: Do you know anything about the Mars rovers Opportunity and Spirit?



Your friend: _____



You: What are they doing there?



Your friend: _____



You: Where do they get their power for this? Don't they run out of fuel?



Your friend: _____



You: When did they go to Mars?



Your friend: _____



You: That's a long time! Did the scientists think they would continue working this long?



Your friend: _____

STEP 6 SLIDE 5:

Answer the questions. Write in the answer you think is the best:

1. The Mars rovers

A B C _____

2. The surface of Mars is

A B C _____

3. The scientists decided

A B C _____

4. It is possible that

A B C _____

STEP 6 SLIDE 8:

1. Why didn't the Mars rovers crash when they landed on Mars?

2. The scientists thought the Mars rovers would stop working after 90 days. Did the Mars rovers keep going after 90 days?

3. What are the Mars rovers doing on Mars?

4. How do the modules of the Space Station get into space?

5. Where does the power for the space station come from?

6. When did astronauts start living in the space station?

7. Why is the space station made of modules?

STEP 6 SLIDE 9:

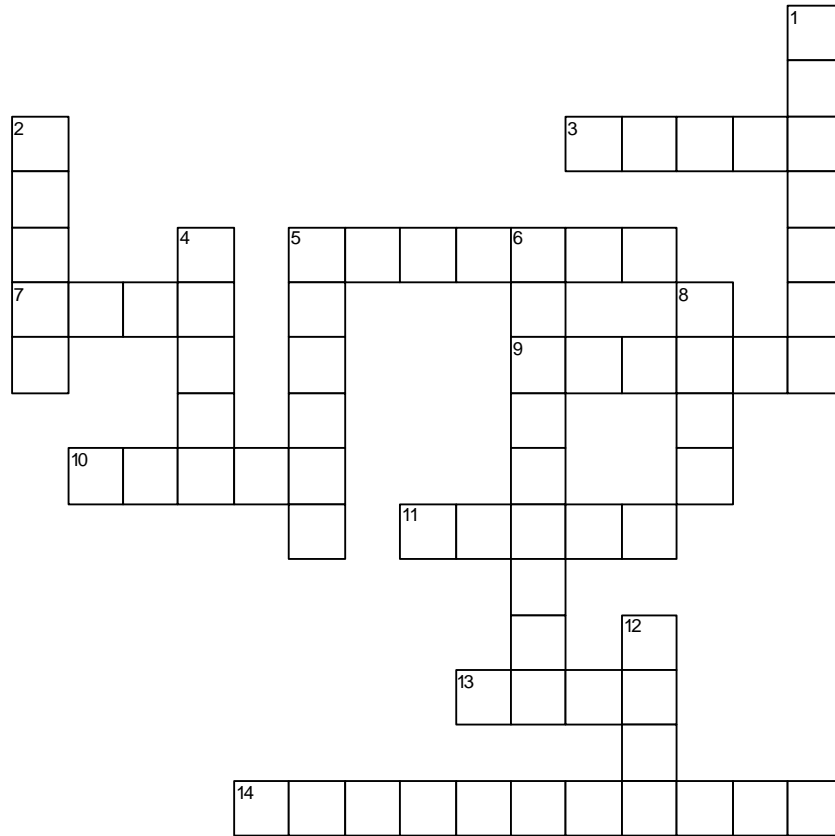
Evening comes to Earth, as seen from space.
Photo courtesy of NASA.



Fill in the blanks:

_____ the past times _____ always looked into the _____. The stars, the moon and the _____ are so beautiful! "Wouldn't it be great if we could _____ through the air like the _____!" he said. _____ thousands of flights in gliders, the Wright brothers built the _____ airplane. _____ people were flying _____. People then started to look at the _____. "We should go there _____!" they said. So the _____ engineers, scientists and _____ worked for years, and one day, a man _____ on the moon. Today, people are _____ in space at the Space Station. Do you _____ that some day _____ will live on _____ planets?

Step 6 Crossword Puzzle:



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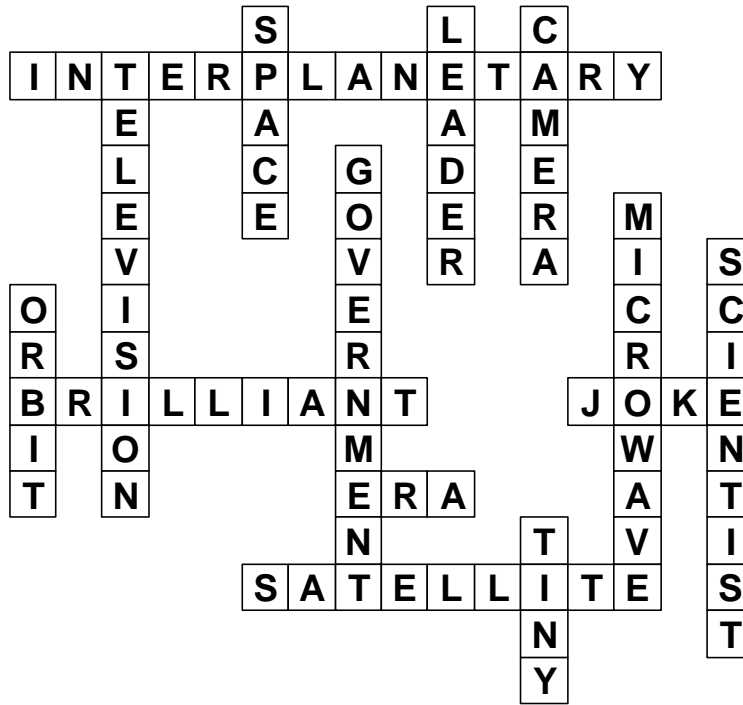
ACROSS

- 3** it travels around
- 5** all people
- 7** not hard
- 9** can move
- 10** a car has four
- 11** when rain comes down
- 13** nothing
- 14** chance

DOWN

- 1** outer part
- 2** break into pieces noisily
- 4** country
- 5** piece
- 6** right now
- 8** water goes through it
- 12** put together

Solution to Step 1 Puzzle:



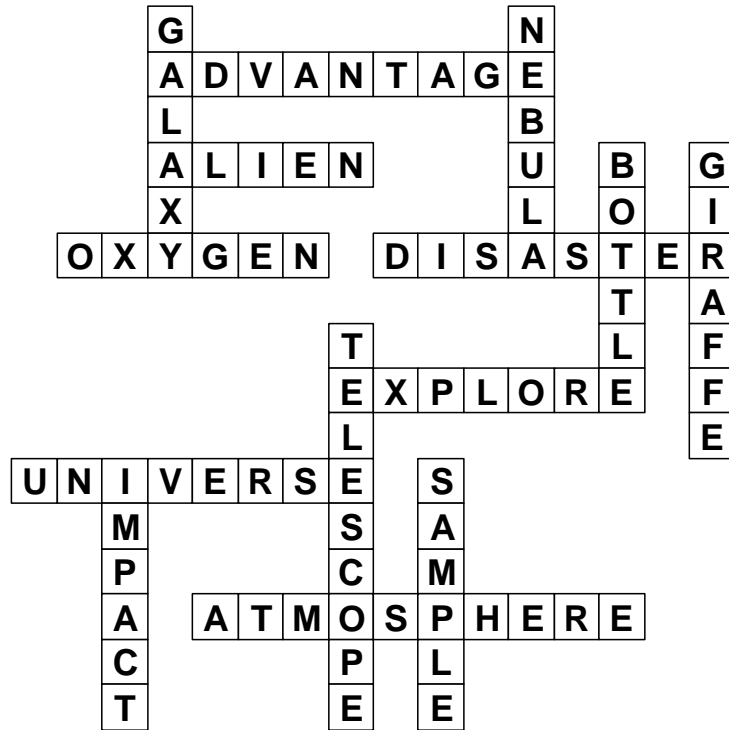
Solution to Step 2 Puzzle:



Solution to Step 3 Puzzle:



Solution to Step 4 Puzzle:



Solution to Step 5 Puzzle:



Solution to Step 6 Puzzle:



**STEP UP TO ENGLISH
LEVEL 18 GLOSSARY**

ENGLISH	NOTES	ENGLISH	NOTES
accident		footprint	
accomplish, to (accomplished)		form, to (formed)	
achievement		frighten, to (frightened)	
advantage		galaxy	
alien		gather, to (gathered)	
astronaut		giant	
atmosphere		giraffe	
attempt, to (attempted)		goal	
benefit		government	
billion		gravity	
blast off, to (blasted off)		hero	
booster		history	
bottle		hop, to (hopped)	
break down, to (broke down)		huge	
breathe, to (breathed)		immediate	
brilliant		impact	
camera		imply, to (implied)	
cargo bay		impressive	
catch up, to (caught up)		industry	
CD player		infra red	
cell phone		interplanetary	
Christmas carol		join, to (joined)	
clothes dryer		joke	
clothes washer		kill, (to) (killed)	
cloudy		leader	
construction		leap	
control, to (controlled)		load	
crane		lunar	
crew		magnetic field	
crisis		mankind	
damage		manned	
danger		mark	
defense		material	
descend, to (descended)		measure, to (measured)	
design, to (designed)		member	
disaster		microchip	
dusty		microwave	
era		military	
exist, to (existed)		mission	
existing		mobile	
explode, to (exploded)		module	
explore, to (explored)		navy	
external		nebula	
face, to (faced)		occupation	

**STEP UP TO ENGLISH
LEVEL 18 GLOSSARY**

ENGLISH	NOTES	ENGLISH	NOTES
offer, to (offered)		tank	
opportunity		television	
orbit		test, to (tested)	
organize, to (organized)		tiny	
oxygen		tool	
page		turtle	
parachute		ultra violet	
pipe		universe	
planet		vehicle	
plant		water	
prison		weapon	
program		wheel	
radiation		wire	
rainy		withdraw, to (withdrew)	
reflection		worry, to (worried)	
remain, to (remained)		zero	
repair, to (repaired)			
research			
robot			
robotics			
rock			
rust			
sample			
satellite			
scary			
scientist			
sea			
soft			
solar panel			
solar system			
solid			
space station			
spacecraft			
spirit			
state			
station			
storm			
stranded			
structure			
sub-orbital			
super power			
surface			
survive, to (survived)			
system			

LEVEL 18 TEST 18

Click on the icons and answer the questions: (4 marks each)

1. _____
2. _____
3. _____
4. _____
5. _____

Make correct sentences from these words: (2 marks each)

6. to orbiter The work have outside astronauts the sometimes.

7. are the orbiting you be hard sleep must when to earth It.

8. Neil excited all the moon stepped world were Armstrong over onto when People the.

9. there days is any in space, so no aren't There rainy atmosphere.

10. want into go though people to is space Even it dangerous,.

Match the Meaning (2 marks each)

- | | | | |
|------------|-------|----------|-------|
| astronauts | _____ | disaster | _____ |
| cargo bay | _____ | external | _____ |
| crane | _____ | tiny | _____ |
| satellites | _____ | tools | _____ |
| spacecraft | _____ | stranded | _____ |

USE THESE WORDS:

where the shuttle carries things
very small
they go into space
means outside
something very bad

to be left behind
they orbit Earth
it lifts things
astronauts ride in it
things you work with