INSTRUCTIONS FOR THE TEACHER

This exercise is a supplement to the exercises of *In Charge 1*, Unit 10, pages 126 through 128.

1. Divide the students into two groups, A and B. Distribute Student Worksheet A to the Group A students and Student Worksheet B to the Group B students. Explain that Group A has one passage and group B has another. Have the students read their passages. You may want to circulate while each group is reading so that you can answer individual vocabulary or general comprehension questions.

2. When the students have finished reading, have each Group A student pair with a student from Group B. Tell the Group A students to ask the questions on their worksheets to find out what the Group B students read about. When the Group A students are finished asking their questions, have Group B students ask their questions. Explain that they are not to show each other their worksheets.

3. Have the pairs answer the questions in Part C. Then, review the answers as a class.

4. Note that an answer key, with sample or suggested answers, is provided for the Student Worksheet.

*Optional:*

Have your students look at the site [http://www.space.com/php/multimedia/imagegallery/] to see space photos.
GRAMMAR / Future Progressive and Future Perfect
Student Worksheet A

A. Read the following passage on space exploration.

By the year 2015, the Russians expect to have a six-person team on their way to Mars. The Russians hope that the American agency NASA and the European Space Agency (ESA) will work together on this project. Two spaceships that can fly the crew to Mars and back will have to be built. These spaceships will enable the crew to remain on Mars for as long as two months. The cost of the trip will be approximately $20 billion, but the Russians feel that the money will have been spent to answer extremely important questions about whether or not there is, in fact, life on Mars.

B. Work with a student from Group B. Ask your partner the following questions. Write down the answers, using complete sentences. Then, answer your partner’s questions.

1. By 2008, what will the ESA have done?
   By 2008, the ESA will have launched a satellite.

2. What will the ESA be searching for, and how?

3. What will be happening for two months?

4. What kind of information will the telescopes be sending to scientists?

5. By the end of two months, what will scientists have learned?

6. What do you think scientists will be planning once they have this information?
C. Work with your partner to:

1. List the main differences between the two projects.

2. Imagine you work for the ESA. Discuss which project you think will have been more successful and more worth the money spent on it. Give reasons for your choice.
A. Read the following passage on space exploration.

A newspaper article reported on the European Space Agency’s (ESA’s) plans to launch a satellite to search for Earth-like planets by the year 2008. The satellite will have four telescopes which will be able to observe different areas of space for two months each. The data accumulated by these telescopes will provide scientists with information about what stars are like on the inside. It is hoped that this information will tell scientists which planets could sustain life. If so, there will be launches later on to search for signs of life in these potentially habitable planets.

B. Work with a student from Group A. Ask your partner the following questions. Write down the answers, using complete sentences. Then, answer your partner’s questions.

1. By 2015, what will the Russians have done?

   By 2015, the Russians will have sent a team to Mars.

2. In the years to come, who do the Russians hope that they will be working with?

3. What do the Russians hope they will be doing together?

4. What will the crew be exploring and studying?

5. How long will they be studying and exploring before they return?

6. By the completion of this mission, how much money will the Russians, NASA, and the ESA have spent?
7. Hopefully, by the year 2015, what questions will this mission have answered?

C. Work with your partner to:

1. List the main differences between the two projects.

2. Imagine you work for the ESA. Discuss which project you think will have been more successful and more worth the money spent on it. Give reasons for your choice.
GRAMMAR / Future Progressive 
and Future Perfect 
Answer Key

B.

Sample answers, Worksheet A

1. By 2008, the ESA will have launched a satellite.
2. It will be searching for Earth-like planets.
3. Each of the telescopes will be observing different areas of space for two months each.
4. It will be sending scientists information about what stars are like on the inside.
5. By the end of two months after the satellite is launched, scientists will have gained valuable information about the potential of other planets to sustain life.
6. Scientists will be planning new launches to search for signs of life in these planets.

Sample answers, Worksheet B

1. By 2015, the Russians will have sent a team to Mars.
2. In the years to come, the Russians hope that they will be working with NASA and the European Space Agency.
3. They hope they will be building the spaceships.
4. The crew will be exploring and studying Mars.
5. They will be doing that for as long as two months before they return.
6. By the completion of this mission, the Russians, NASA, and the ESA will have spent $20 billion.
7. Hopefully, by the year 2015, this mission will have answered questions about life on Mars.

C. Sample answers

1. The Russians will be working together with the Americans and the Europeans but the ESA project will just involve the Europeans.
2. The Russian project will take at least 7 years longer.
3. The Russian project will be more expensive.
4. The ESA project is launching a satellite whereas the Russian project is launching two spaceships.
5. The ESA project is unmanned whereas the Russian project will involve a human crew.
6. The Russian project is going to Mars to look for life whereas the ESA project is looking for the potential for life on other planets.
INSTRUCTIONS FOR THE TEACHER

These exercises are a supplement to In Charge 1, Unit 10.

1. Distribute the Student Worksheet to your students. Check that students are aware that NASA is a U.S. government agency. Ask students if anyone knows what the initials NASA stand for (National Aeronautics and Space Administration). If none of the students know, you could have them research that question for homework.

2. For Part A, have the students read NASA’s list of academic and professional qualifications for astronauts. Have students in small groups or pairs decide which personality traits would be important for an astronaut to have.

3. For Part B, ask the students to brainstorm other jobs in the space industry. Then have them complete the exercise. You may want to direct interested students to this website on the different jobs at NASA: <http://www.nasajobs.nasa.gov/jobs/NASA_Occupations.htm>

4. Have students read through the list of employees at NASA and guess the percentage of total NASA employees each category makes up. You may want to explain the difference in status of professionals, technicians, and support staff. The correct percentages are given in the answer key which follows. To make this activity into a game, write each group's percentages on the board and see which group comes the closest to being correct.

5. Have the students discuss the question in Part D in their groups. If you wish, have them make a four-column chart with two of the columns on one side being the advantages and disadvantages of countries working together, and the other two columns being the advantages and disadvantages of countries working independently. After the students finish making their lists, have the groups share their ideas with the class.

6. Note that an answer key is provided for the Student Worksheet.
A. Have you ever thought about being an astronaut and going into space? According to NASA’s website, astronauts should have the following:

1. engineering and science qualifications
2. strong leadership and team building skills
3. experience working on a diverse, multi-cultural team

Work in groups and make a list of personality traits you think would be necessary to be a successful astronaut. Give reasons for your choices.

B. Being a space scientist and working on the ground in the space industry require special skills. Which astronaut qualifications do you think would be relevant for space scientists? What other subjects do you think space scientists normally study?

C. NASA’s employees fit into one of the categories below. In your groups, make a guess as to the percentage of NASA employees that fit into each category. Give reasons for your choices. The group that comes the closest to being correct wins.

1. ______ administrative and management
2. _____ 9% technical and medical support (e.g., medical, electronic, and engineering technicians)
3. ______ professional, engineering, and scientific
4. ______ trades and labor (e.g., electricians and repair people)
5. ______ clerical and administrative support (e.g., accounting technicians, typists, secretaries, etc.)

D. At various times, different countries have competed against one another to be the first to accomplish specific space oriented goals such as getting to the moon.

Discuss the advantages and disadvantages of countries working separately and of countries working together. What do you think the trend will be in the future? Give reasons for your choices.
A. Answers will vary.

B. Possible answers include the following:
   astronomy, geology, meteorology, oceanography, math, physics,
   engineering, computer sciences, and life sciences

C.
   1. 24%
   2. 9%
   3. 60%
   4. less than 1%
   5. 7%
IN CHARGE 1

VOCABULARY

INSTRUCTIONS FOR THE TEACHER

These exercises are a supplement to *In Charge 1*, Unit 10.

1. Distribute the Student Worksheet to your students. You may want to review the questions with the students before having pairs respond to them.

2. Tell the students to reread each item and to think about their responses for a minute or two before discussing them. Circulate while students are working on the exercise to offer individual assistance with vocabulary or language questions. Alternatively, you may choose to have students read and think about the questions for homework, and discuss them in class.

3. Have each pair choose one or two of their most interesting exchanges to share with the class.
VOCABULARY
Student Worksheet

Name: _______________________

Work in pairs and follow the instructions. Use the fill-in lines for notes, and then discuss your answers with your partner. Use the words in boldface in your responses.

1. Name a prominent astronaut and say what his or her prominent achievement was.

________________________________________________________________

2. What do you think is the most grueling part of being an astronaut? How about the most grueling part of learning English?

________________________________________________________________

3. Think about your professional experience. What aspect of your job would you say you are the most seasoned at?

________________________________________________________________

4. Name two things you have done in your life recently about which you had second thoughts at the outset. Now how do you feel about them?

________________________________________________________________

5. Do you know anyone who is a would-be actor, musician, teacher, business owner, etc.? What is he/she a would-be of? Tell your partner about this person and what he or she is doing to pave the way for what he/she wants to become. What do you foresee happening to him/her professionally?

________________________________________________________________

6. What is the most commonplace part of your job or studies? Tell your partner how you feel about it.

________________________________________________________________

(more)
7. Think about your dreams. Tell your partner about one of your dreams that you believe is truly **viable**, and one which you think is not.

________________________________________________________________

8. Is there a current trend, e.g., social, fashion, artistic, musical, etc., that you don’t agree with? What action would you **call for** to change it?

________________________________________________________________

9. What do you think the space agency’s current efforts are **paving the way** for in the future? Do you think your efforts to learn English might be **paving the way** for some professional or personal change in your life? If so, what?

________________________________________________________________

10. **Ultimately**, how far do you think you will get in your professional career? How about in your efforts to learn English?

________________________________________________________________

11. In your opinion, who is the most **stunning** movie star at the moment? What is the most **stunning** part of your country?