# Rocketry & Space
## Module Activity Sheet

**Name** _____ **Block** _____

**Enter Date example: Oct. 25**

### Session # 1

Module Guide Score = _____ / 10 ..... Date Completed_____
Space Exploration Activity .....Date Completed_____
Review Game (Bloop or Critter Cross Played) .....Date Completed_____

### Session # 2

RCA 's Score = _____ / 30 .....Date Completed_____
Rocketry and Space Flight Activity.....Date Completed_____
Assessment Answers Completed in Packet (Pg. 2)... Date Completed_____
Vocabulary Page Completed in Packet (Pg. 5) ..... Date Completed_____

### Session # 3

RCA's Score = _____/ 30 ..... Date Completed_____
Rocket Assembly Part 1 ..... Date Completed_____
Technical Writing Page Completed in Packet(Pg. 6) Date Completed_____

### Session # 4

RCA's Score = _____ / 30 ..... Date Completed_____
Recovery Systems Activity .....Date Completed_____
Rocketry Assembly Part 2..... Date Completed_____
Career Sheet Page Completed in Packet (Pg. 7)..... Date Completed_____

### Session # 5

RCA's Score = _____ / 30 .....Date Completed_____
Rocket Assembly Part 3 .....Date Completed_____
Assessment Answers Completed in Packet (Pg. 3)....Date Completed_____
Word Search Page Completed in Packet (Pg. 8).....Date Completed_____

### Session # 6

Test Review "Game"..... ..... Date Completed_____
Rocket Coloring Activity .....Date Completed_____
Assessment Answers Completed in Packet (Pg. 4).. Date Completed_____
Test Review Page Completed in Packet (Pg. 9)..... Date Completed_____

### Session # 7

Post Test Score = _____ / 100 % ... .....Date Completed_____
Life in Space Activity .....Date Completed_____
I Have Inspected My Packet – It is Complete.....Date Completed_____

# Rocketry & Space
## Assessment Worksheet for Session 2

Instructions: On the session indicated above , please write the answers to the assessment questions.

**If you need more room to write a response – use the back of this page.**

### Session 2 – Rocketry and Space Flight

1. **List** any three individuals who played a significant roles in rocketry and space / flight history. (**If you need help** – use the Aerospace: Journey of Flight book in your module library. Chapter 27 starting on page 583 has plenty of answers.

   1.

   2.

   3.

2. **Describe** the main stages of rocket flight.

3. **Identify** 5 main parts of the rocket assembly kit. (Sketch and List is the best way to answer this)

4. **Explain** how to attach the fins to the body tube of the model rocket.

# Rocketry & Space
## Assessment Worksheet for Session 5

Instructions: On the session indicated above , please write the answers to the assessment questions.

**If you need more room to write a response – use the back of this page.**

**Session 5 – Rocketry Kit Assembly**

1. **How** did you divide the string for the parachute into six equal parts?

2. **Correctly name** two types of recovery system used for getting space craft or model rockets back to earth.

3. **Why** is it important to have the engine mount glued in place? Could you skip gluing the mount?

4. **Explain** the use of the flame proof wadding.

# Rocketry & Space
## Assessment Worksheet for Session 6

Instructions: On the session indicated above , please write the answers to the assessment questions.

**If you need more room to write a response – use the back of this page.**

### Session 6 - Rocket Painting

1. **Explain** the scientific principle that allows the space shuttle to lift off.

2. **Are you** pleased with the coloring job on your rocket? What would you change / do different if you could do it again?

3. **List** the 4 steps on how a solid fuel model rocket engine works. (Hint: Use the Model Rocket book in your module library)

    1.

    2.

    3.

    4.

4. **What** was the easiest / hardest part of building a model rocket?

    **Easiest:**

    **Hardest:**

# Rocketry & Space
# Vocabulary Worksheet

**Please write a definition for each vocabulary term.**

1. NASA- _____

2. Transportation- _____

3. Autopilot- _____

4. Binary code- _____

5. Closed-loop system- _____

6. Craft- _____

7. Energy- _____

8. Jet engine- _____

9. Laser- _____

10. Motor- _____

11. Process- _____

12. Schedule- _____

13. Propellant- _____

14. Science- _____

15. Technology- _____

# Technical Writing

1. **Locate the book "*The Way Things Work*" and select any topic of interest to you. Read the section you selected. In the provided space below, describe / summarize what you have learned about your selected topic in complete sentences. If your writing does not fill the entire section, select a second topic to complete your writing assignment.**

   ***** To get full credit your writing should fill all the lines *****

**Topic Title** _____ **Page #** _____

2. **Now, select another section of this book or any other book at your module. Read a section of interest to you. In the provided space below, describe / summarize what you have read about your selected topic in complete sentences. If your writing does not fill the entire section below, select a second topic to complete your writing assignment.**

   ***** To get full credit your writing should fill all the lines *****

**Book Name / Topic Title** _____ **Page #** _____

# Rocketry and Space Career Investigation

**From the *Occupational Outlook Handbook* –Look up the career that is assigned to your module topic. Using the information in the book answer the following question about the assigned career. The career for your module is:**

## Aerospace Engineers and is on Page 134

1. **Nature of the work** (What does the occupation do?):

   **A.**

   **B.**

2. **Working conditions** (Ex. inside / outside, clean / dirty, safe / hazardous etc.):

3. **Training or education needed, other qualifications required, and possible advancements / promotions:**

4. **Job Outlook** (In the future, what is the demand / forecast for this job):

5. **Earnings** (What is the average salary / income for this career):

6. **Related occupations** (What other occupations are part of the selected topic):

   **A.**

   **B.**

7. **Sources of additional information** (Sites, agencies or references to provide more information on your selected occupation):

   **A.**

   **B.**

# Rocketry & Space WordSearch

S M I A Z M M B U O N G M C V D A D D H
P K A S I O M X I D G A B S R O H E I P
Z M S Q N Z D M K P T F I M C A F Y E P
S P E N I G N E N Z F H L G Z Y W L E E
P V B Z O T N O A O E I U M E R S I P G
S S E A R E G I T D B Y S R I B A E B H
A S J T B G D F D D I M B O E E F S R E
R I I H I I I E A D E H X R M I S J Q G
L Z E D T L S O I H A H W E T G H R S E
U M F S E I L G P A N W O D T N U O C L
E Y P D R Y O E O T A F I N U I T R T E
E A O F A V A S T N U F R A B T T E D X
A I H P X R T R E A E A C M Y E L T H Y
C F T Y S T K E F L S N N M S R E U O O
I N R C B L L P L L X L O O S A O H K S
T M D N R R E R H E E G T C R R K C A C
C M C G S A S S Q P Y B O O S T H A O E
E E J N S L F E M O G E O Q M R S R E S
D I M A N E U V E R I N G G T R D A U V
E O N T E G M L L P L L C M V H V P F E

**Find the following hidden words:**

**nasa, shuttle, astronaut, boost, commander, countdown, emu, tank, liftoff, maneuvering, orbiter, payload, propellant, satellite, srbs, fin, engine, igniter, wadding, cord, parachute, cone, eyelet,**

# ROCKETRY & SPACE

**Circle the correct answers while playing the Review Game at the beginning of Session # 6.**

1. Select the statement that best describes Yuri Gagarin's accomplishment on April 12, 1961.
   A. He became the first man on the Moon.
   B. He invented the rocket engine.
   C. He became the first man in space.
   D. He was born.

2. In which field was Goddard considered an American pioneer?
   A. railroad systems
   B. airplane travel
   C. modern rocketry
   D. the Moon

3. What was Alan Shepard the first person to accomplish?
   A. first person to break the sound barrier
   B. first person in space
   C. first American to land a spacecraft on the Moon
   D. first American in space

4. In what year did humans first set foot on the Moon?
   A. 1957
   B. 1960
   C. 1969
   D. 1973

5. The *Columbia* was the first of what to be flown into space?
   A. Apollo rocket
   B. satellite
   C. space shuttle
   D. monkey

6. According to Newton's first law of motion, for every action there is what kind of reaction?
   A. basic
   B. equal and opposite
   C. different
   D. greater and opposite

7. Why do rockets work?
   A. Galileo's law
   B. Ohm's law
   C. Murphy's law
   D. Newton's law

8. Armstrong was the first man to do what on the Moon?
   A. drive on
   B. return to
   C. orbit
   D. set foot on

9. What type of fuel is used in model rocketry?
   A. liquid
   B. gas
   C. solid
   D. carbon dioxide

10. What was the motivating factor that inspired the members of the Apollo space program?
    A. dedication to putting a man in space
    B. dedication to launching the first satellite
    C. dedication to putting a man on the Moon
    D. dedication to exploring Mars