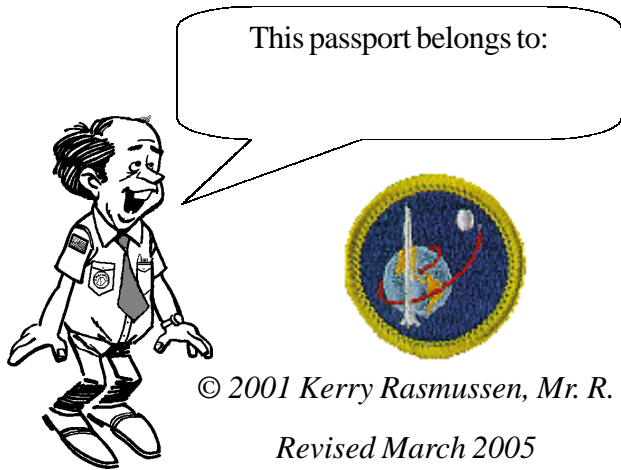
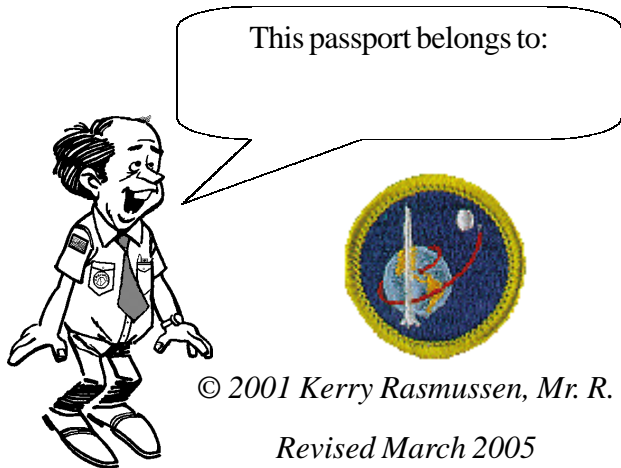


Visit the "Scouting with Mr. R." web site at www.relia.net/~thedane/scouting.html



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PURPOSE & BENEFITS (1)

Tell the purpose of space exploration including:

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immediate goals (in terms of specific knowledge)

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SPACE EXPLORATION

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

- | | | |
|-------------|-----------|-----------|
| ASTRONAUNT | ORBIT | SATELLITE |
| BASE | PARACHUTE | SHUTTLE |
| BRAUN | PIONEER | SOLAR |
| CENTRIPITAL | PLANETS | SPUTNIK |
| GODDARD | PROBE | UNMANNED |
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T	U	A	S	E	T	B	I	T	A	S	M	O	O	N
N	I	A	D	E	L	P	I	U	C	F	B	W	S	P
K	B	B	N	D	I	L	P	H	H	C	N	X	P	Y
Q	V	A	R	R	O	D	I	S	U	O	O	F	U	V
I	L	B	T	O	P	G	O	T	T	X	H	N	C	L
P	F	N	P	T	C	X	D	P	E	X	M	R	W	X
B	E	S	P	U	T	N	I	K	I	A	X	O	N	K
C	N	O	I	T	C	A	E	R	N	O	X	C	R	I
A	S	T	R	O	N	A	U	N	T	U	N	K	O	O
S	B	Z	Z	L	W	X	E	L	P	Z	U	E	E	T
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On March 16, 1926, Goddard had constructed and tested successfully the first rocket using liquid fuel at Auburn, Massachusetts.

Wernher von Braun

At the age of 13, von Braun was very interested explosives and fireworks. His father worried that his young son would become safecracker! One day the young teenager obtained six skyrockets, strapped them to a toy red wagon and set them off. Streaming flames and a long trail of smoke, the wagon roared five blocks into the center of the von Braun family's hometown, where the rockets finally exploded. As the smoke cleared, the toy wagon emerged as a charred wreck. Young von Braun emerged in the firm grasp of a policeman.



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SPACE PIONEERS (2)

Design a collector's card about your favorite space pioneer. On the front of the card place their picture.

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CAREERS (8)

Discuss **two** possible careers in space exploration that interest you. List the qualifications, education, preparation required and major responsibilities.

Career 1 _____

Qualifications _____

Education _____

Preparation _____

Responsibilities _____



● http://www.nasajobs.nasa.gov/jobs/civil_service_job_

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K.E. Tsiolkovsky

Alan Shepard



Robert Goddard

John Glenn



Hermann Oberth

Neil Armstrong



Wernher von Braun

...plus many, many more!



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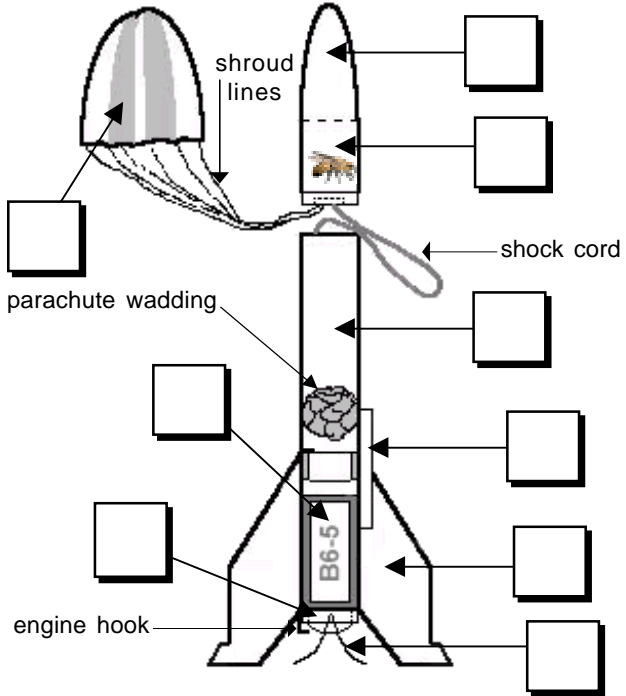


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MODEL ROCKET (3)

- ☐ Build, launch, and recover a model rocket.
- ☐ Make a 2nd launch to accomplish a specific objective: _____



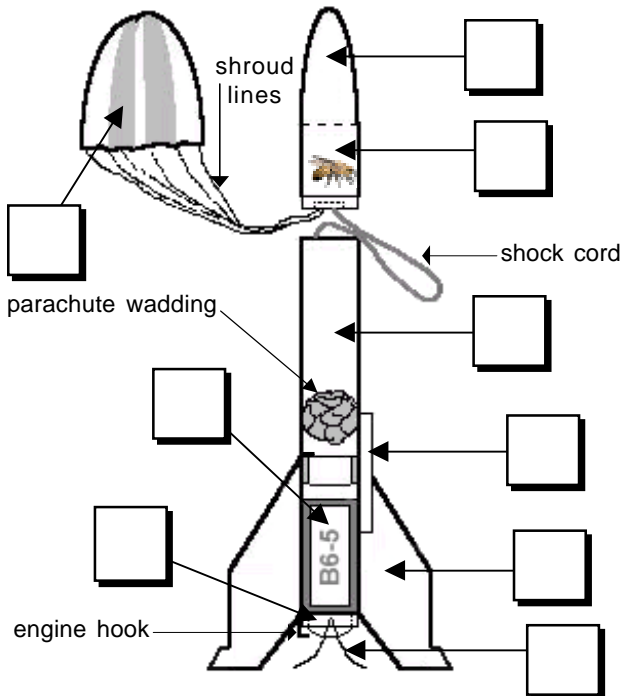
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INHABITED BASE (7)



NOTE: In your design, consider and plan for the following:
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Identify and explain the following rocket parts:

- a. body tube _____

- b. engine mount _____

- c. fins _____

- d. igniter _____

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- f. nose cone _____

- g. payload _____

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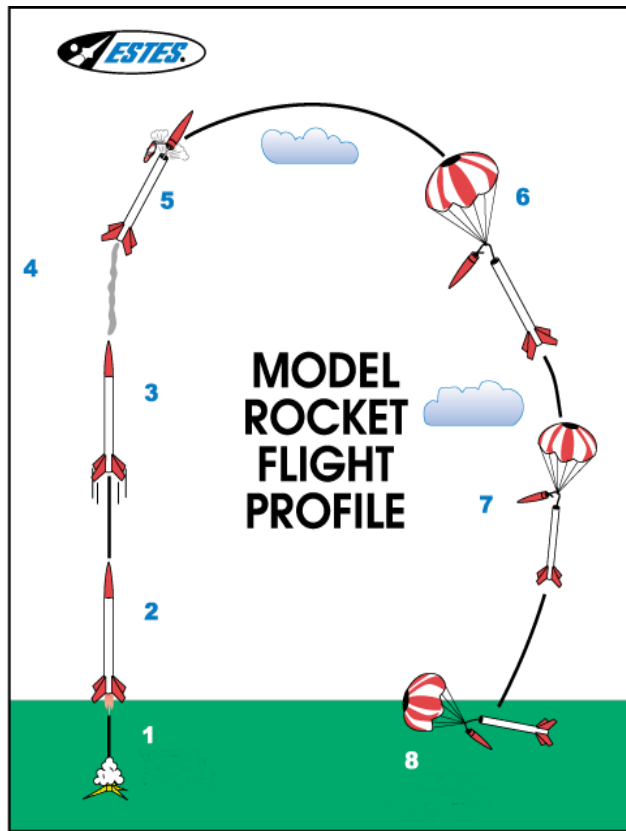
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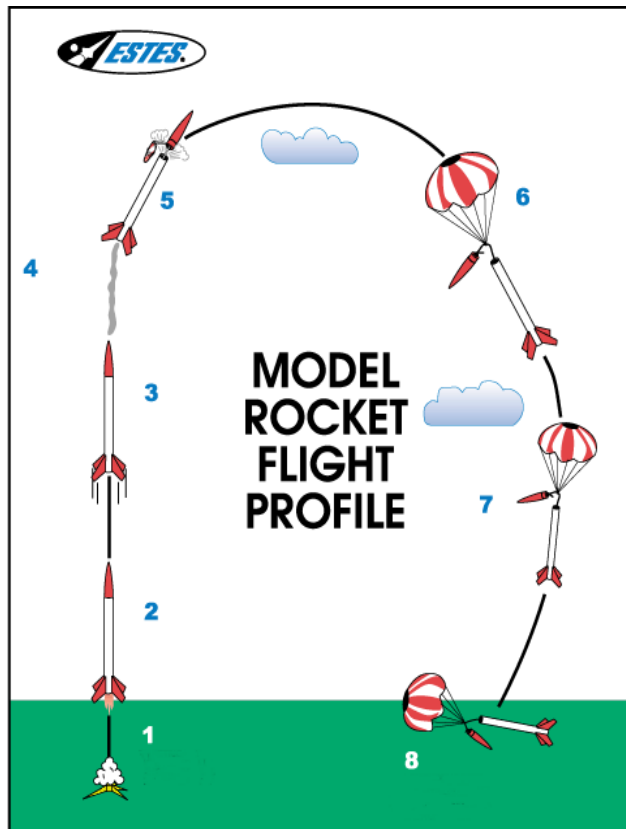
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● <http://www.esteseducator.com/cfusion/rocketry101.cfm>

Name of planet or moon:



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SPACECRAFT (option 5c)

NOTE: Remember to show how your design will cope with the conditions of the planet's or moon's environment.

RESEARCH (5)

Do **TWO** of the following (on the next few pages):

- a. Discuss an unmanned space exploration mission **and** an early manned mission. Tell about each mission's major discoveries, its importance, and what we learned from it about the planets, moons, or regions of space explored.
- b. Using magazine photographs, news clippings, and electronic articles (such as from the Internet), make a scrapbook about a current planetary mission.
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On the Saturn V rocket, each engine weighs less than 7,000 pounds but puts out the power equivalent of seven Hoover Dams!

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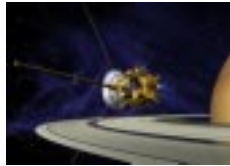
REPORT (option 5a)

Unmanned Mission _____

Major Discoveries _____

Mission's Importance _____

What we learned _____



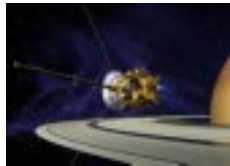
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Early Manned Mission _____

Major Discoveries _____

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The word astronaut means "star sailor" in Latin.

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