***Extra Terrestrial Excursions***

***Materials***

* Calculator

***Procedure***

1. On the worksheet, record your age (Age Today).

2. Use the following information to figure travel time to the Moon and each planet.

* Calculate hours of travel time by dividing the distance from Earth by the speed of 25,000 mile per hour. This is the speed your spaceship will reach. Round to the nearest hour.
* Calculate the days traveled by dividing the hours by 24 and round to the nearest day.
* Calculate travel time in months by dividing days by 30 and rounding to the nearest month.
* Calculate years traveled by dividing months by 12.

3. By adding that amount of time to your age, record your Arrival Age in the proper column.

4. Use the information about travel time to answer the questions on Special Delivery.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Extra Terrestrial Excursions***

*My Age Today \_\_\_\_\_\_*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Solar System Object | Distance (miles) | Hours distance ÷ 25,000 | Dayshours ÷ 24 | Monthdays ÷ 30 | Yearsmonths ÷ 12 | Age at Arrival Years + Your age today |
| Moon | 238,000 |  |  |  |  |  |
| Mercury | 57,040,000 |  |  |  |  |  |
| Venus | 25,420,000 |  |  |  |  |  |
| Mars | 35,000,000 |  |  |  |  |  |
| Jupiter | 389,980,000 |  |  |  |  |  |
| Saturn | 760,740,000 |  |  |  |  |  |
| Uranus | 1,687,020,000 |  |  |  |  |  |
| Neptune | 2,695,140,000 |  |  |  |  |  |
| Pluto | 3,565,000,000 |  |  |  |  |  |

***Extra Terrestrial Excursions – Special Delivery***

|  |
| --- |
| Imagine that you work for the Solar System’s Delivery Service. You need to determine the time necessary to make certain deliveries and return to Earth. The planets are not lined up in a straight line in their orbits around the Sun. You must always return to Earth for refueling between planets! |

1. Deliver communication systems to Mercury and Jupiter.

 Travel Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Deliver pizza to Venus and Mars.

 Travel Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. You travel to one outer and one inner plant and back home again. Your journey takes you about 7 years, 6 months. To which planets did you travel?

 Planets: \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_,

4. Starting at Neptune, you travel home to Earth and then deliver letters to Mars.

 Travel Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Extra Terrestrial Excursions – Special Delivery - Key***

Deliver communications systems to Mercury and Jupiter.

 ***Travel Time – 3.8 (4) years***

Deliver pizza to Mars and Venus.

 ***Travel Time – 6.6 (7) months***

You travel to one outer and one inner planet and back home again. Your journey takes you about 7 years, 6 months. To which planets did you travel?

 ***Planets – Mars & Saturn***

Starting at Neptune, you travel home to Earth then deliver letters to Mars.

 ***Travel Time – 13.4 years (13 years 5 months)***