

Special Delivery

Purpose: To determine the travel time between different planets.

Imagine that you work for the Solar Systems 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. Using the Planetary fact sheet and spaceship speed of 40,000 MPH, answer the following questions.

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 planet and back home again. Your journey takes you about 7 years, 8 months. To which planets did you travel?

Travel Time: _____

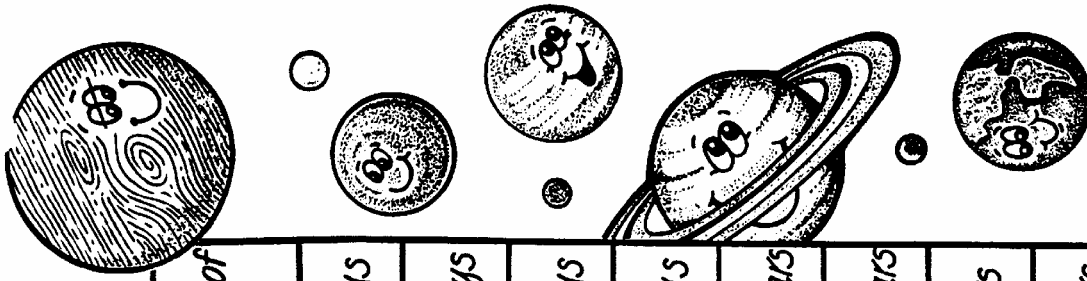
4. Starting at Neptune, you travel home to Earth and then deliver letters to Mars.

Travel Time: _____

5. Design a “Mystery” trip to two of the planets. Remember to always stop at the Earth between planets. How long would your mystery trip take?

Travel Time: _____

PLANETARY FACTS



	Distance From Earth in Millions of Km	Distance From Sun in Millions of Km	Density	Mass	Temperature	Gravity	Length of Year
Mercury	91.7	57.9	5.5	0.055	-170° to 350°C	0.39	88 days
Venus	41.4	108.2	5.2	0.815	465° C surface	0.91	225 days
Earth	0	149.6	5.5	1.0	15° C avg. surface	1	365 days
Mars	78.3	227.9	3.9	0.11	-23° C avg. surface	0.38	687 days
Jupiter	628.7	778.3	1.3	318	-150° C at cloud tops	2.60	11.9 years
Saturn	1277	1,427	0.7	95.2	-180° C at cloud tops	1.07	29.5 years
Uranus	2721	2,870	1.3	15	-210° C at cloud tops	0.90	84 years
Neptune	4347	4,497	1.6	17	-220° C at cloud tops	1.15	165 years
Pluto	5,750	5,900	2.1	0.002	-220° C avg surface	0.03	248 years