

Student Worksheet

Planetary Travel Time

The solar system is huge! Using current technology, it takes a long time to get from Earth to another planet. Do the math and figure out just how long! Then, figure out how long it would take if we could travel at the speed of light (~1,079,000,000 km/hr).

First, figure out how far you would have to travel, on average, if you could travel in a straight line to your destination.

Write an equation for determining the distance Mercury is from Earth:

Write an equation for determining the distance Jupiter is from Earth:

Planet/Dwarf Planet	Distance from the Sun (km)	Distance from Earth (km)
Mercury	57,900,000	
Venus	108,200,000	
Earth	149,600,000	
Mars	227,900,000	
Jupiter	778,600,000	
Saturn	1,433,500,000	
Uranus	2,872,500,000	
Neptune	4,495,100,000	
Pluto	5,906,400,000	

Next, compute the length of time (in hours) it would take you if you were walking, riding a bike, driving a car, riding on a rocket or traveling at the speed of light.

Write an equation for determining travel time, t: _____

Planet/Dwarf Planet	Walking (5 km/hr)	Riding Bike (20 km/hr)	Driving Car (120 km/hr)	Riding Rocket (365,000 km/hr)	Traveling at the speed of light
Mercury					
Venus					
Earth					
Mars					
Jupiter					
Saturn					
Uranus					
Neptune					
Pluto					