

Name \_\_\_\_\_ Date \_\_\_\_\_



# Physical Science: Motion and Forces

## STUDENT HANDOUT-LESSON 3

**Basic Principle** The velocity of an object is the rate of change of its position.

**Objective** Plot and interpret graphs of position versus time.

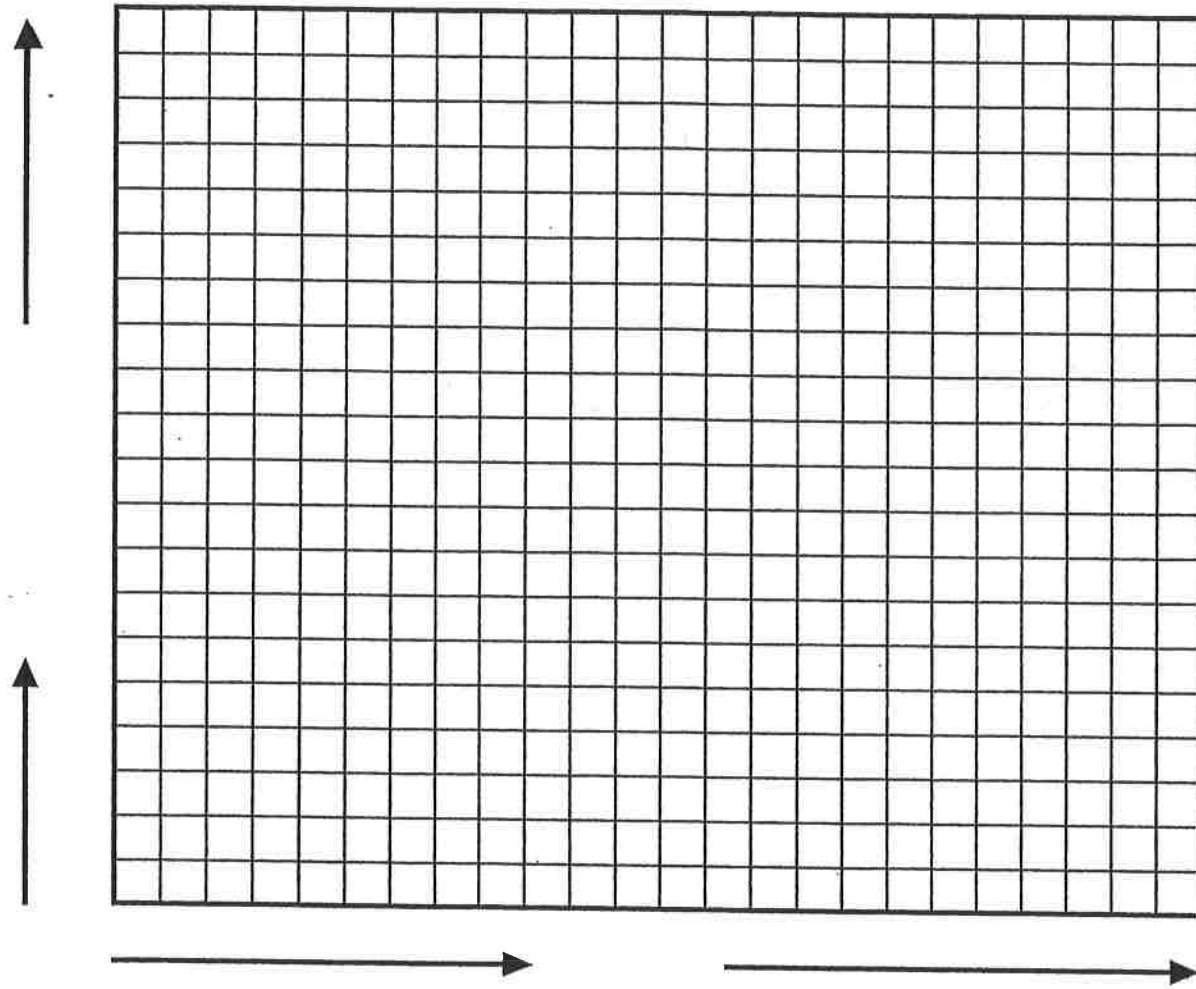
**Materials** pencil

### Procedure

1. Graph the information in Table A, which describes the motion of a moving object.
2. Complete the *Observations & Analysis* section. (Use the space below for your work.)

time	9 A.M.	10 A.M.	11 A.M.	12 P.M.	1 P.M.	2 P.M.	3 P.M.	4 P.M.	5 P.M.	6 P.M.	7 P.M.
total distance	0 km	4 km	8 km	12 km	18 km	24 km	30 km	32 km	34 km	36 km	38 km

**Student Handout-Lesson 3** *(Continued)*



**Observations & Analysis**

1. How far did the object travel between 9 A.M. and 12 P.M.? \_\_\_\_\_
2. How far did the object travel between 12 P.M. and 3 P.M.? \_\_\_\_\_
3. How far did the object travel between 3 P.M. and 7 P.M.? \_\_\_\_\_
4. How far is the object from its starting position at 3:30 P.M.? \_\_\_\_\_
5. At what time is the object 21 km from its starting position? \_\_\_\_\_
6. What is the object's average speed between 9 A.M. and 12 P.M.? \_\_\_\_\_
7. What is the object's average speed between 12 P.M. and 3 P.M.? \_\_\_\_\_
8. What is the object's average speed between 3 P.M. and 7 P.M.? \_\_\_\_\_
9. What is the object's average speed between 9 A.M. and 7 P.M.? \_\_\_\_\_