

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Block: \_\_\_\_\_

## Drive To School

HYPOTHESIS: What do you think is the average velocity you travel on the way to school (use miles per hour if necessary)? \_\_\_\_\_

1. How many miles is the drive to school (approximately)? \_\_\_\_\_

2. Convert this measurement to meters. \_\_\_\_\_

HINT: 1 mi = 5280 ft and 1 m = 3.28 ft (show work)

3. What are the speed limits of the roads between your house and school? \_\_\_\_\_

4. As *accurately* as possible, estimate how many minutes it usually takes you to get to school (from door to door). \_\_\_\_\_

5. Calculate the average velocity you would need to achieve in order to arrive at school within the time you said it usually takes *in meters per second*. HINT:  $v = d/t$

SHOW YOUR WORK BELOW & CIRCLE YOUR ANSWER

6. Convert your answer into miles per hour (Carefully!) \_\_\_\_\_

7. Does your answer seem right to you? \_\_\_\_\_

Is your answer higher or lower than you predicted? \_\_\_\_\_

8. On average, how many times do you need to come to a complete stop on the way to school? \_\_\_\_\_

9. How many turns do you have to take? \_\_\_\_\_

10. If your hypothesis was wrong, propose an explanation as to why. \_\_\_\_\_

# Motion and Speed

In each of the following statements, a term has been scrambled. Unscramble the term and write it on the line provided.

- \_\_\_\_\_ 1. When something moves, it changes *iitsopon*
- \_\_\_\_\_ 2. *Otoinm* can be described as a change in position.
- \_\_\_\_\_ 3. Speed is the *etra fo neahgc* in position.
- \_\_\_\_\_ 4. *Sttananuoseni eedps* is the rate of motion at any given instant.
- \_\_\_\_\_ 5. A speed that doesn't vary is called a *tntnsoca dspee*.
- \_\_\_\_\_ 6. The total distance traveled divided by the total time of travel is called the *evraage pesed*.
- \_\_\_\_\_ 7. A *naesidtc-miet* graph makes it possible to "see" the motion of an object over a period of time.

Now find each unscrambled term in the hidden word puzzle below. The terms can be written horizontally, vertically, or diagonally and forward or backward. Circle each term as you find it.

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