

Middle School Science

Name:

Date:

The Nervous System Worksheet

This worksheet accompanies slide 3 of *The Nervous System.ppt*

What's your reaction time?

Measure your reaction time and answer the questions below.

Fast responses are useful because they can help you to react to situations quickly. You can test how fast your reflexes are by measuring your **reaction time**.

Measure your reaction time using a falling ruler.



1. Extend your arm over the edge of a table and have a partner hold a ruler between your fingers at the 0 cm mark.
2. When your partner drops the ruler, catch it between your fingers and thumb as quickly as possible.
3. Repeat the test 10 times, recording your results in the table below, and calculate the mean (average) distance. Then convert the distance into a reaction time.

attempt	distance dropped (cm)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
average	

Middle School Science

Name:

Date:

1. What is your reaction time? Circle the value that is closest to your reaction time.

distance on ruler	time	distance on ruler	time
1 cm	0.05 sec	16 cm	0.18 sec
2 cm	0.06 sec	17 cm	0.19 sec
3 cm	0.07 sec	18 cm	0.19 sec
4 cm	0.08 sec	19 cm	0.20 sec
5 cm	0.09 sec	20 cm	0.21 sec
6 cm	0.10 sec	21 cm	0.21 sec
7 cm	0.12 sec	22 cm	0.21 sec
8 cm	0.13 sec	23 cm	0.22 sec
9 cm	0.14 sec	24 cm	0.22 sec
10 cm	0.14 sec	25 cm	0.23 sec
11 cm	0.14 sec	26 cm	0.23 sec
12 cm	0.15 sec	27 cm	0.23 sec
13 cm	0.16 sec	28 cm	0.24 sec
14 cm	0.16 sec	29 cm	0.24 sec
15 cm	0.17 sec	30.cm	0.25 sec

2. Does your reaction time increase with practice? Why do you think this is?

.....

.....

.....

.....

Athletes often need quick reflexes. They can improve the speed of their reflex by practicing their sport.

3. Which sports require fast reflexes?

.....

.....