

## The Beat Goes On Activity – Heartbeat Math Worksheet

### Questions

Find your pulse on your neck. Count how many heartbeats you feel in 10 seconds.

I felt \_\_\_\_\_ heartbeats in 10 seconds.

- 1) How can we figure the heart rate per minute if we only had 10 seconds to time our heartbeat?

*Example:* I felt 20 heartbeats in 10 seconds.

60 seconds = 1 minute

60 seconds  $\div$  10 (the number of seconds we have to time) = 6

To find the heart rate after only 10 seconds, multiply 20 (number of heartbeats in 10 seconds) by 6.

*Answer:* My heart rate is 120 beats per minute (20 x 6 = 120)

**Now you try it!** Count how many heartbeats you felt in 10 seconds.

I felt \_\_\_\_\_ heartbeats in 10 seconds.

Remember: 60 seconds = 1 minute and  $10 \times 6 = 60$ ; so I need to multiply the number of my heartbeats by 6 to get my heart rate:

\_\_\_\_\_ x 6 = \_\_\_\_\_

My heart rate is \_\_\_\_\_ beats per minute.

- 2) What if you wanted to find out how many times your heart beats in one hour?

There are \_\_\_\_\_ minutes in one hour.

So, I need to multiply the number of times my heart beats per minute (\_\_\_\_\_) and the number of minutes in one hour (\_\_\_\_\_) to get my heart rate per hour: \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

My heart rate is \_\_\_\_\_ beats per hour.

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

3) What if you wanted to find out how many times your heart beats in one day?

There are \_\_\_\_\_ hours in one day.

So, I need to multiply the number of times my heart beats per hour  
(\_\_\_\_\_) and the number of hours in one day (\_\_\_\_\_) to get my heart  
rate per day: \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

My heart rate is \_\_\_\_\_ beats per day.

4) What if you wanted to find out how many times your heart beats in one year?

There are \_\_\_\_\_ days in one year.

So I need to multiply the number of times my heart beats per day  
(\_\_\_\_\_) and the number of days in one year (\_\_\_\_\_) to get my heart  
rate per year: \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

My heart rate is \_\_\_\_\_ beats per year.

### Challenge Questions

1) What if you lived to be one hundred years old? How many times would your heart beat?

2) The average heart pumps about 1.7 gallons of blood per minute. Can you figure out how much blood is pumped in 1 hour? One day? One year?