You think you’re fast?

Small objects that are super quick
Blinking test

How many times can you blink in one second?

In your group of three, have one person time and the other person count the blinks.

How many seconds does it take to blink once?
Molecular Motion

See a computer simulation of a salt molecule dissolved in water.

This was a slowed animation... how much time do you think is represented?

If the Chlorine atom moved one inch in that time, how many miles per hour is that?
Protein folding

When a protein forms in our body, it quickly folds into its “native shape”

Computer simulations are used to model these because it happens very fast

Rotations and partial folds can happen as fast as $1 \times 10^{-12}$ sec
Relative times

Let’s say a protein takes $1 \times 10^{-6}$ seconds to fold.

How many of these proteins could fold consecutively in the time it takes to blink once?
Road Trip

Let’s say you’re driving to Tucson.

How many proteins do you think would fold in your body during your trip?

Be ready to present and explain your answer!