

TIME space

Time flies like an arrow
Fruit flies like a banana

Does time flow at a constant rate? (Think about that sentence a bit!)

Psychological time does **not!** Proof:

Rainy Sundays seem to last forever—but, of course, time *flies* if you're having fun!

OK, let's do a **simple experiment**. Let's COMPARE two very different methods of judging just **how much** time has passed, between two specific events:

The two events are: 1) you let go of a marble 2) the marble hits the floor

The two **methods** we will use are:

1) **Watch** the marble fall. Describe what you see: ask, *does the marble speed up, as it falls?*

OK, you've done that! It seems to you that the marble falls with CONSTANT speed. **(95% do)**

2) Now, **time** the fall using a **stopwatch** (so there's *no human physiology* involved!)

That second method allows you to **test** your conclusion that the marble falls with constant speed.

It's easy to time the fall even *without* using a stopwatch. You don't *need* a stopwatch! Instead,

simply time it by saying: **Elephant One, Elephant Two, Elephant Three, ...**

(The word Elephant is chosen so that each utterance is, pretty accurately, one second long.)

Result:

If the marble falls **six inches**: **Eleph... OK, about half a second!**

If the marble falls **three feet**? Ummm...

first, let's **predict** how long it will take, using the **scientific** result that we **just got**: Let's see...

Three feet, is SIX time six inches, so, we predict, ... let's calculate ... **three seconds** for the fall!

Well, the ball is in *your* court, dear reader:

I won't spoil it by *telling you the answer!*