- You travel 4 meters east, 2 meters west, 3 meters east, and 1 meter west in a time of 5 seconds.
- Find your:
- Distance
- Displacement
- Average Speed
- Average Velocity

10 m
4 m east
2 m/s
0.8 m/s east

- Mr. Kuncik's story!

Position

One-Dimensional Only!

(for now)

- Here…you actually have the power to *create your own universe*!
- [in your mind]

- Position: where you are located in respect to a point called the origin.
- Origin: A special point somewhere in your problem. The physicist decides where it is, and it can be anywhere?
- Direction is determiend by a POSITIVE and NEGATIVE sign.

- Scalar: a quantity with only magnitude
- Vector: a quantity with *magnitude* and *direction*.
- In *one dimensional physics,* direction is determined through the SIGN.

- ON your whiteboard, write if your position si *positive* or *negative*
- [We will consider only one-dimensional position in these problems. So, pretend you live in a one-dimensional universe.]

- Imagine that the origin is the door
- The positive direction is towards the windows.

- The origin is the projector.
- The positive direction is towards Mr. Kidney's room.

- The origin is Mr. Kuncik's chair.
- [the really beat up one that says Hamer on it.]
- The positive direction is towards the window.

- The origin never moves!

- The origin is the door to Ms. Graser's room.
- The positive direction is towards the stairs to the cafeteria.

- For the following range of pictures.
- Decide on the location of an origin.
- Decide on the *positive direction* and the *negative direction*.
- Find the position of each ball.
- Give your work to your partner to check.

- If, in your answer, everything was positive, then, just for giggles, come up with a different answer that makes *one* of the circles have negative position and the other two positive.