Activity: Jumping

Bending knees or no bending knees?

- Attempt to jump as high as possible, **without bending your knees and mark the location on a nearby wall, cabinet or object with a Post-It**
- Then, jump as high as possible, **WITH bending your knees and mark the location with a Post-It**

In your modeling diagrams (1 for each jump):

1) Why do you think you can jump higher with the change? What **measurable physics quantities are there at your lowest and highest points**?
2) Use **vectors (arrows representing a physics quantity with direction and size)** to show your speed or **velocity at the start and highest point of each jump**
3) Include **discussion of how quantities like those velocities and the time of the trip differ** along with the height of each jump