




Glue this side into your notebook



1. 

Ivan
38 kg

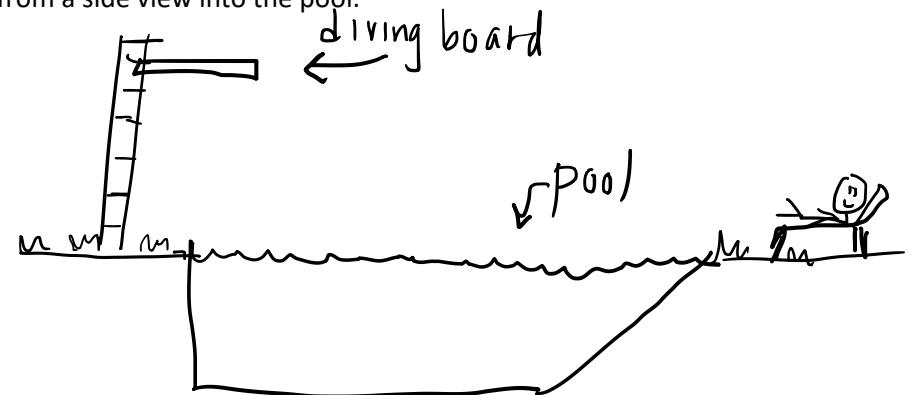
Sabrina
50 kg

Marco
51 kg

Sarah
36 kg

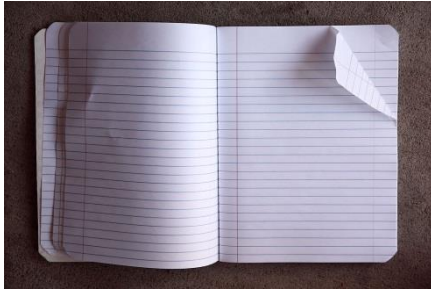
Which of the students has the **most** gravitational potential energy? **How do you know?**

2. Draw a picture of a person where they would have the **maximum** amount of potential energy and another person where they would have the **minimum** amount of potential energy here at the swimming pool, seen from a side view into the pool.



3. If someone says that to make potential energy stronger you have to “go against the nature” of what an object “wants” to do, what does that mean? Give an example for electrical or magnetic energies.

4. Katniss is trying to learn how to be a better archer (someone who uses a bow and arrow). She is in science class learning about elastic potential energy. On her homework she has to draw a picture of a rubber band with a **maximum** amount of elastic potential energy and a different one with a **minimum** of elastic potential energy. Draw her homework below with labels.



4. You have a bowling ball which has 10 times the mass of a baseball. You want to place them on shelves at the sporting goods store so that they are equal in their amount of gravitational potential energy. You know that there are 2 factors that affect the amount of gravitational potential energy, and use this to help you out. Draw where you think the bowling ball and baseball should be placed so that their gravitational potential energies are even.



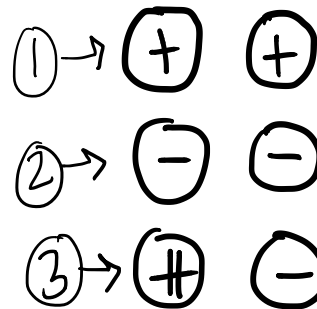
5. Explain how you could INCREASE the amount of magnetic potential energy below and explain why.



6. In the lab you saw a few examples of how we can identify that chemical potential energy was used. Explain/sketch an example of how thermal energy can be seen when chemical potential energy is used.

7. When chemical potential energy is used (in other words, when a chemical reaction happens), what happens to the atoms?

8. Explain how you could INCREASE the amount of electrical potential energy below and explain why.



9. Fill in the chart below:

Type of potential energy	Factors that affect it
chemical	
electrical	
magnetic	

10. In the lab you compressed a racquet ball and a ball made from dough. Which has more potential energy when compressed and why?