Worksheet 1.3.8 Understanding potential energy and kinetic energy

You are producing a plan for an investigation to find out the minimum height of drop required to burst a water balloon.

1 What are the variables? >

a) What is the independent variable in the investigation? ……………………………………………….

b) What values will you choose? ……………………………………………….

c) What is the dependent variable? ……………………………………………….

d) How will you measure it? ……………………………………………….

e) Which variables will you control? ……………………………………………….

f) What values will you choose for these controlled variables? ……………………………………………….

g) What are the hazards and risks of the investigation? ……………………………………………….

h) What safety precautions will you take to address these risks and hazards? ……………………………………………….

2 Accuracy and reliability >>

a) How will you make sure your results are accurate?

 ………………………………………………………………………………………………………………….

b) How will you make sure your results are reliable?

 ………………………………………………………………………………………………………………….

3 Evaluating your investigation >>>

a) How will you decide if your investigation is reproducible?

 ………………………………………………………………………………………………………………….

 ………………………………………………………………………………………………………………….

b) How will you know if your results are accurate and reliable?

 ………………………………………………………………………………………………………………….

 ………………………………………………………………………………………………………………….

c) What could you do to improve your investigation further?

 ………………………………………………………………………………………………………………….

 ………………………………………………………………………………………………………………….