Slinky Drop

Intermediate Science

* Force (Gravity, Tension, Newton’s Laws)
* Energy transfer (potential to kinetic) as slinky drops

Videos listed below can be found at the following link:

<http://blogs.sd41.bc.ca/science/youtube-videos/>



1) Show video: ‘Introduce slinky drop problem’

* Will bottom end fall first?
* Will top end fall first?
* Will both ends fall together?
* Will ends approach each other and meet in the middle?

2) After the video introduces the problem,

a) have each student predict how the slinky will drop – **record their prediction**

 *(may want to use PEOE template provided)*

b) in groups of 2 or 3, have students drop a slinky and do their best to observe and see what happened

- this will be difficult as it drops very quickly

- if cameras are available, you can record the drop and see if the recording is helpful

- have each student **record their observation**

note: to help protect the slinky from damage:

i) drop slinky so the bottom is approx. 30 cm (or less) above the floor

ii) hold the top end so approximately 1 cm of the top is compressed together

c) Show video: ‘Answer to slinky drop problem’

* have students **reflect upon the activity**
* the video will also ask an extension question (tennis ball tied to the slinky)
* have students predict answer to this extension
* show video ‘Answer to tennis ball extension’

note: you may want to use the other two videos as well

* A slightly more detailed explanation to slinky drop
* Slinky drop from high places (for fun)