

The Simpson investigations

Independent	Investigation 1 Independent variable:	Investigation 2 Independent variable:
Danaudaut	Dependent variable:	Dependent variable:
Dependent	Fair test:	Fair test:
Fair test	Investigation 3	Investigation 4
	Independent variable:	Independent variable:
	Dependent variable:	Dependent variable:
Success criteria	Fair test:	Fair test:

<u>Investigation 1 -</u> <u>Which shoes Homer?</u>



- Homer has just been picked for a bowling team
- He has <u>rubber shoes</u>, <u>leather shoes and the</u> <u>plastic shoes</u>.
- He tests each shoe by running 2 metres and then measures how far he slips down the ally.
- He wants to find the shoes which will give him the least amount of slip.

Investigation 2 -Bart at the skateboard park





- On the way home from school Bart and Millhouse stop off at the skate park.
- The two of them decide to have a downhill race on their skate boards over a distance of 10 metres.
- For a challenge, Bart thinks it would be a good idea for both of them to put <u>different numbers of school</u> books on their head's.
- They get Lisa to <u>time them and calculate their speed</u>.

Investigation 3 - Lisa skipping science project



- Lisa decides to test how the <u>length of rope</u>
 will affect the number of skips in <u>10 minutes</u>.
- She has three different sizes of ropes -1 meter, 2 meters and 3 meters.
- She asks Marge to time her using a stopwatch and she asks Bart to count the number of skips.

Investigation 4 - Maggie, up, up and away!!!

How many balloons does it take for Maggie to fly away?

- Bart and Maggie are playing with balloons.
- Bart blows each balloon up with <u>4 puffs of</u> <u>helium.</u>
- He gives them to Maggie one by one and times how long it takes her to start floating off the ground.

Plenary...

Brain storm this....



You are building a brand new indoor tennis center and want to know which surface would be best for a tennis ball.

Use key words in your answer

- 1. What is your independent variable?
- 2. What is your dependent variable?
- 3. How will you make it a fair test?

