

Name:	Class:	Date given:
		Date due in:

# Identifying Variables

For each of the investigations described you need to identify the independent variable (IV) and the dependent variable (DV).

Remember: the independent variable is changed by the investigator, and the dependent variable is measured and recorded.

1. John was investigating how the amount of sunlight affects the size of the leaves of a tree.

IV:	
-----	--

DV:	
-----	--

2. Madeline carried out a test to see if the height of a person was related to how fast they can run.

IV:	
-----	--

DV:	
-----	--

3. Akbar did a scientific investigation to measure how much energy was stored in different types of crisps.

IV:	
-----	--

DV:	
-----	--

4. Jayden conducted a survey to find out if the most common hair colour was the same in boys and girls.

IV:	
-----	--

DV:	
-----	--

5. Sasha did a series of investigations to see if the height of a ball's bounce was dependent on the size of the ball.

IV:	
-----	--

DV:	
-----	--

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# Identifying Variables

For each of the investigations described you need to identify the independent variable (IV) and the dependent variable (DV).

Remember: the independent variable is changed by the investigator, and the dependent variable is measured and recorded.

For each dependent variable you identify, suggest a piece of equipment that could be used to measure it, and the units of measure that are most appropriate.

1. Elizabeth carried out an investigation to observe the relationship between water temperature and how quickly it can be frozen.

IV:	
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Equipment:	
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DV:	
-----	--

Units:	
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2. Rhys was investigating how far a car continued to travel after braking on different road surfaces.

IV:	
-----	--

Equipment:	
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DV:	
-----	--

Units:	
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3. Mohammed carried out an investigation to find out how far a spring could be stretched before it wouldn't recoil to its original shape again.

IV:	
-----	--

Equipment:	
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DV:	
-----	--

Units:	
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4. Zi Xin was carrying out a experiment to see how the number of bulbs in a circuit affected the brightness of the light produced.

IV:	
-----	--

Equipment:	
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DV:	
-----	--

Units:	
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# Identifying Variables **Answers**

1. John was investigating how the amount of sunlight affects the size of the leaves of a tree.

IV: **amount of sunlight**

DV: **size of the leaves**

2. Madeline carried out a test to see if the height of a person was related to how fast they can run.

IV: **height of the person**

DV: **how fast they can run**

3. Akbar did a scientific investigation to measure how much energy was stored in different types of crisps.

IV: **type of crisp**

DV: **how much energy**

4. Jayden conducted a survey to find out if the most common hair colour was the same in boys and girls.

IV: **boys or girls**

DV: **hair colour**

5. Sasha did a series of investigations to see if the height of a ball's bounce was dependent on the size of the ball.

IV: **size of the ball**

DV: **height of bouncing ball**

# Identifying Variables Answers

1. Elizabeth carried out an investigation to observe the relationship between water temperature and how quickly it can be frozen.

IV: **temperature**

Equipment: **timer/stopwatch**

DV: **time**

Units: **minutes/hours**

1. Rhys was investigating how far a car continued to travel after braking on different road surfaces.

IV: **road surface**

Equipment: **tape measure/trundle wheel**

DV: **distance**

Units: **metres**

2. Mohammed carried out an investigation to find out how far a spring could be stretched before it wouldn't recoil to its original shape again.

IV: **distance (stretched)**

Equipment: **ruler**

DV: **distance**

Units: **centimetres**

3. Zi Xin was carrying out a experiment to see how the number of bulbs in a circuit affected the brightness of the light produced.

IV: **number of bulbs**

Equipment: **data logger (light intensity sensor)/PC**

DV: **bulb brightness**

Units: **percentage/lumens**