

AQA Biology GCSE

RP 07: Reaction time

Practical notes

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Human reaction time

Aim

Investigate the effect of practice/repetition on the reaction time of a ruler drop test. Requires partners.

Equipment

- Metre ruler
- Chair
- Table

Method

- 1. Sit down on the chair and place your forearm of your weaker/non-dominant hand on the table with your hand hanging over the end of the table.
- 2. Have your partner hold a ruler with the bottom end in between your fingers so you can practice holding the ruler with 2 fingers.
- 3. Have your partner hold the ruler and remove your fingers.
- 4. Have your partner hold the ruler in line so that the 0 mark is level with the top of your thumb.
- 5. Your partner will drop the ruler without telling you beforehand, and you will catch the ruler as quickly as you can.
- 6. Note and record the number level with the top of your thumb after you have caught the ruler in a table such as below.
- 7. Repeat the test at least 5 times.
- 8. Swap places with your partner and repeat steps 1-7.
- 9. Find reaction times by using a conversion table to convert the ruler measurements.¹

| Drop test attempts | Ruler measurements in cm | | Reaction times in seconds | |
|--------------------|--------------------------|----------|---------------------------|----------|
| | Person 1 | Person 2 | Person 1 | Person 2 |
| | | | | |

Sources of error

Participants may have different experiences in performing a similar task previously i.e. some participants may already be practiced in this task.

Sample size may be too small to make a valid conclusion.







¹ AQA Practical Handbook