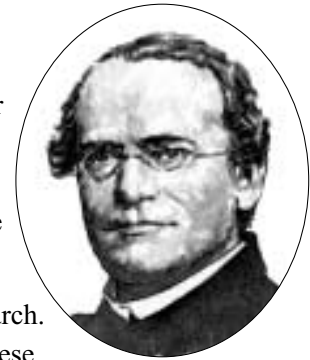


A

Our understanding of genetic inheritance was established through experiments with pea plants. The experiments were done by an Austrian monk called Gregor Mendel in (1) _____. It is because of this work that he is thought to be the father of modern genetics. Mendel spent many years of his life as a teacher and was known to want (3) _____ but was unable to pass the exam.



It was during the middle of his life that Mendel began his groundbreaking research. He studied seven basic characteristics (5) _____ and by following these characteristics through a number of generations discovered three basic laws of inheritance, which are:

- 1 The inheritance of each characteristic is determined by units (now known to be genes) that are passed on to (7) _____ in an identical form.
- 2 An individual inherits one of these units from each parent for each characteristic. One unit is dominant and one is recessive.
- 3 A characteristic may not be shown in an individual because it is recessive but can still be passed on to the next generation.

These findings were published in (9) _____ but were sadly ignored until after Mendel's death. It was not until 1900 that he was discovered to have revealed the secrets of heredity.

B

Our understanding of genetic inheritance was established through experiments with pea plants. The experiments were done by an Austrian monk called Gregor Mendel in the 19th century. It is because of this work that he is thought to be (2) _____. Mendel spent many years of his life as a teacher and was known to want a teaching qualification but was unable to pass the exam.



It was during the middle of his life that Mendel began (4) _____. He studied seven basic characteristics of the pea plant and by following these characteristics through a number of generations discovered three basic laws of inheritance, which are:

- 1 The inheritance of each characteristic is determined by (6) _____ (now known to be genes) that are passed on to descendants in an identical form.
- 2 An individual inherits one of these units from each parent for each characteristic. One unit is dominant and one is recessive.
- 3 A characteristic may not be shown in an individual because it is recessive but can still be passed on to (8) _____.

These findings were published in 1886 but were sadly ignored until after Mendel's death. It was not until 1900 that he was discovered to have (10) _____.

Mendel's discovery

Activity Information gap

Aim To complete a text about Gregor Mendel by asking a partner questions.

Interaction Pairs

Language focus Passive structures

Skills focus Speaking

Preparation Photocopy one worksheet for each pair of students and cut it in half.

Time 20 minutes

- Procedure**
- 1 Explain that Gregor Mendel is the father of modern genetics. Tell the students to discuss in pairs what they know about genetics and how we inherit things like eye and hair colour from our parents.
 - 2 Pre-teach the words *characteristic*, *generation*, *descendent*, *dominant* and *recessive*.
 - 3 Explain that the students will have the same text about Mendel but that Student A has the information Student B is missing and vice versa.
 - 4 Write *The experiments were done by _____* on the board and elicit the question *Who were the experiments done by?* Write it on the board.
 - 5 Divide the students into two groups, A and B. Give each student in group A card A and each student in group B card B. Tell them to work with a partner from the same group and write all five of the questions they need to ask. Monitor to offer help and to check the correct formation of questions.
 - 6 When the students have written their questions, tell them to work with a new partner from the other group. Explain that they need to write the answers to their questions in the appropriate gaps.
 - 7 Tell them to begin asking their questions. Monitor to correct any mistakes.
 - 8 When the students have finished, ask them to compare their pieces of writing to make sure they are the same.

Variation When they have completed their text, tell them to turn over their papers and tell their partner everything they can remember about Gregor Mendel.

- Key**
- 1 When were the experiments done?
 - 2 What is he thought to be?
 - 3 What was he known to want?
 - 4 What did Mendel begin during the middle of his life?
 - 5 What basic characteristics did he study?
 - 6 What is the inheritance of each characteristic determined by?
 - 7 Who are genes passed on to?
 - 8 Who can a recessive characteristic be passed on to?
 - 9 When were the findings published?
 - 10 What was he discovered to have done in 1900?