



Exploring the Human Genome

Lesson plan

Starter activity	Learning objectives
Ask students to list everything they know about genomic sequencing. Can they give any examples?	<ul style="list-style-type: none"> To compare the benefits and drawbacks of genomic sequencing. To reflect on the ethical challenges of genomics.
Main activities	Resources required
Divide the class into two groups and explain that one is going to research the benefits of genomic sequencing/testing, and the other will research the drawbacks.	<ol style="list-style-type: none"> Devices for performing research. Materials for collecting and presenting research.
Groups should take into account ethical considerations, and give relevant examples from the media. Information in Steps 1.11 and 1.12 will be useful sources. Monitor the research process and elicit relevant ideas via discussion (e.g. 'designer babies', equality, data protection).	Assessment for Learning Contribution to group work, votes and discussions.
After group research is finished, hold a vote in which students decide whether or not they would choose to have their genome sequenced.	Differentiation SEND: Teacher-led support Low ability: Peer-learning. Gifted and Talented: Peer-teaching.
Each group then presents their findings and arguments to the other.	Plenary Students discuss the following question in pairs:
After this, hold another vote and compare how responses have changed. Ask students who have changed their vote to discuss why they have done so.	<ul style="list-style-type: none"> Do you think there is a risk that patients may confuse a genomic risk (identified through testing) with a diagnosis? What are the implications of this?