Autumn Term

Year 11 B13 Reproduction

Aiming for Grade 8

Extended Homework Assignment

Name: _____

Set: _____

Instructions

A printed copy should be handed into your teacher.

The knowledge required to complete this assignment will be supported in class in lessons of the half term.

B13 Reproduction – Aiming for Grade 8

Aims

The aim of this homework is to help you revise the main topics in Chapter 13, Reproduction.

Learning outcomes

After completing this activity, you should be able to:

- explain the advantages and disadvantages of asexual and sexual reproduction
- explain what occurs during the process of meiosis
- describe the structure of DNA
- describe protein synthesis
- complete a genetic cross diagram

Task

Using knowledge you have gained in lessons and your own research, complete the tasks below.

Questions/task output

Part 1 – Asexual and sexual reproduction.

1 Write the headings ‘asexual reproduction’ and ‘sexual reproduction’ on a sheet of paper.

2 Under each heading, write down all the advantages and disadvantages of that type of reproduction.

3 Can you explain how some of the features can be both advantages *and* disadvantages?

Part 2 – Meiosis

4 Create a flowchart describing what occurs during meiosis.

Part 3 – Diagram of DNA.

Use the internet to find a simple diagram of the structure of DNA. Draw it and label the parts of its structure. Describe what a nucleotide is, and how complimentary base pairing works.

Part 4 – Protein synthesis

Using your student books to help you, draw a flowchart to describe protein synthesis.

Part 5 – Inheritance

5 B – is the allele for Brown eyes b – is the allele for blue eyes.

Using the alleles above, is it possible for two brown eyed parents to have a blue eyed child? Explain your answer and show your workings.

A brown eyed man and a blue eyed woman had children. They had a mixture of brown eyed and blue eyed children. Can you work out the genotype of the father? Explain your answer and show your workings.