Improving food production

Student: .... Class: .... Due date: ....

1. **Define the term 'arable land'.**

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2. **Choose two relevant strategies listed in Figure 1 below, and then add them to the diagram over the page.**

FIGURE 1 Strategies for improving food production

Improve irrigation infrastructure

Pipes and channels make better use of water resources, as in the Murray–Darling Basin.

Make the most of existing food resources by reducing waste

30 to 40% of food in the developed and developing worlds is lost to waste.

Sustainable intensification of cropping

Produce more food from the same area of land by applying water, nutrients and pesticides only where and when required, avoiding waste.

Examine new regions for growing food

e.g. Ord River irrigation area in the Kimberley and greenhouse agriculture, Port Augusta

Expand aquaculture

Increase the amount of fish and seafood produced by fish farms to reduce pressure on fish in the wild.

Increase productivity using genetically modified crops

GM plants are resistant to disease, grow faster and produce higher yields.

Strategies to improve food production

Improve infrastructure

Roads in developing countries allow poor farmers to move their produce to markets for sale. Link farmers to markets via mobile phones.

Reduce the yield gap

Raise the crop yield of the world's most ineffective farms to 95% of the best yields in similar climates. This could produce 50% to 60% more food worldwide.

New sources of food

In Africa, Asia and Latin America, 1400 species of worms, locusts, grasshoppers, spiders, ants and beetles are an important source of protein.

Change diets

62% of crops are used to feed people; 35% feed meat and dairy animals; 3% is for biofuels and other uses. Switching to vegetarian diets would allow agricultural land to produce 50% more human food.

Crop intensification

Obtain the most output from an area. A second or third crop could be harvested from an area in one year. Feedlot beef farming and poultry battery farming are examples.

	New sources of food Worms, locusts, grasshoppers, spiders, ants and beetles are an important source of protein	

3. **Suggest a reason *for* using new food sources and a reason *against* using new food sources.**

FOR	AGAINST
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