SECTION 4 *Questions 31–40*

Complete the notes below.

*Write **ONE WORD ONLY** for each answer.*

Marine renewable energy (ocean energy)

Introduction

More energy required because of growth in population and **31** .....

What's needed:

- renewable energy sources
- methods that won't create pollution

Wave energy

Advantage: waves provide a **32** ..... source of renewable energy

Electricity can be generated using offshore or onshore systems

Onshore systems may use a reservoir

Problems:

- waves can move in any **33** .....
- movement of sand, etc. on the **34** ..... of the ocean may be affected

Tidal energy

Tides are more **35** ..... than waves

Planned tidal lagoon in Wales:

- will be created in a **36** ..... at Swansea
- breakwater (dam) containing 16 turbines
- rising tide forces water through turbines, generating electricity
- stored water is released through **37** ..... , driving the turbines in the reverse direction

Advantages:

- not dependent on weather
- no **38** ..... is required to make it work
- likely to create a number of **39** .....

Problem:

- may harm fish and birds, e.g. by affecting **40** ..... and building up silt

Ocean thermal energy conversion

Uses a difference in temperature between the surface and lower levels
Water brought to the surface in a pipe

LIVEWORKSHEETS