

Read the text below. For questions (23-32) choose the correct answer (A, B, C or D). Write your answers on the separate answer sheet.

### SATURN'S WATERY MOON MAY BE PRIME SPOT FOR LIFE

Researchers have discovered a deep saltwater ocean on one of the many small moons that orbit Saturn, (23) ..... scientists to conclude it is the most likely place in the solar system for extraterrestrial life to be (24) .....

Gravitational field measurements taken by Nasa's Cassini space probe revealed that a 10kmdeep ocean of water lurks (25) ..... the icy surface of Enceladus at the moon's south pole.

David Stevenson, a planetary scientist at the California Institute of Technology in Pasadena, said the body of water was so large it "may (26) ..... halfway or more towards the equator in every direction".

The presence of a saltwater ocean a billion kilometres from Earth more than satisfies Nasa's long-held mantra of "follow the water" to find signs of alien life, but water is not the only (27) ..... that makes Enceladus such a promising habitat. The water is in contact with the moon's rocky core, so elements (28) ..... for life, such as phosphorus, sulphur and potassium, will leach into the ocean.

The (29) ..... discovery, reported in the journal, Science, gives scientists the strongest indication yet that the source of water vapour coming from Enceladus is a large body of water underneath the surface of the icy moon.

An international team led by Luciano Iess at the Sapienza University in Rome inferred the existence of the ocean after (30) ..... a series of exquisite measurements made during three fly-bys between April 2010 and May 2012, which brought the Cassini spacecraft within 100km of the surface of Enceladus.

Enceladus is not the only moon in the solar system to have a subsurface ocean. But Saturn's moon has (31) ..... scientists because the vapour plumes from the south pole are known to contain organic molecules. These, along with (32) ..... elements, a source of heat and liquid water, make Enceladus a prime candidate in the search for alien organisms. [82]

23	A	making	B	leading	C	resulting	D	suggesting
24	A	found	B	existed	C	invented	D	appeared
25	A	above	B	in	C	on	D	beneath
26	A	grow	B	extend	C	extent	D	reach
27	A	origins	B	sign	C	factor	D	cause
28	A	useful	B	accountable	C	beneficial	D	major
29	A	scientific	B	last	C	latest	D	newest
30	A	making	B	taking	C	doing	D	performing
31	A	excited	B	appealed	C	encouraged	D	made
32	A	basic	B	essentially	C	other	D	similar

LIVE WORKSHEETS