B2 True/False/Not given READING

FUKUSHIMA

Read the text about the Fukushima Daiichi Nuclear Power Plant and the following statements (**9-16**). *Choose* **True**, **False** *or* **Not given**. *The first one* (**0**) *is an example.*

At 2:46 p.m. (Japan Standard Time) on 11th March 2011 a magnitude-9.0 earthquake shook the Pacific coast of Japan. At 3:32 p.m. a tsunami swept over the coast and led to the meltdown at the Fukushima Daiichi Nuclear Power Plant. The tsunami killed more than 15,000 people whereas the number of direct deaths from the nuclear accident was almost nil, although some people experienced direct injury and an indeterminate number were destined to disaster-correlated, stress-induced deaths.

After the earthquake, the subsequent tsunami caused the reactors to fail all emergency operations. In fact, the seawater poured over the seawalls and flooded the 6 reactors, disabled the emergency diesel engines in one of them, stopped the pumps in two others, thus making it impossible for three of the cores to cool down. Many parts of the reactors went into overpressure and an explosion in one of them blew the roof apart and unfiltered volatile radioactive elements were released into the air, the soil and the sea. More explosions followed.

The operations which continued during the following months involved rebuilding and fortifying the seawall, mapping the site contamination, attenuating radioactive dust, disposing of contaminated liquids and preventing more radioactive leakages. Workers were busy working at the site during the first days, but robots were employed to carry out the rest of the work during the following months and years. Human-operated and controlled, they helped to understand what had happened and contributed to estimating the damage and to cleaning up the contaminated debris.

The robots that have been used in the last few years are exceptional machines that can go up and down stairs, plunge into water and reach places that workers cannot access. They are equipped with light and recording cameras and work in extreme conditions: their circuits, though shielded, are constantly threatened by gamma rays and can become so contaminated that they often need to be disposed of: they are completely sealed and buried. This process has been going on for years and scientists have estimated that it could take 40 more. The explosion and the tsunami terrified the villagers who lived near the nuclear plant to such an extent that they quickly moved away, leaving the area where solar-powered radiation dosimeters were later installed on the roadsides, which already indicate that some of those villages have now been declared safe.

Test 4

		True	False	Not given
0	*The tsunami caused the nuclear disaster.*	☒	☐	☐
1	There were more deaths caused by the tsunami than the nuclear disaster.	☐	☐	☐
2	The cores of the six reactors at the Fukushima Daiichi Nuclear Power Plant could not cool down.	☐	☐	☐
3	Radioactive substances were released into the atmosphere.	☐	☐	☐
4	The seawall that had been destroyed by the tsunami was immediately reconstructed.	☐	☐	☐
5	The flux of contaminated liquids was stopped in the following months.	☐	☐	☐
6	Robots and humans worked together in extreme conditions.	☐	☐	☐
7	There were places where it was forbidden to enter.	☐	☐	☐
8	Although it will take years to decontaminate the whole area, some villages are now decontaminated.	☐	☐	☐

Punteggio massimo: 8 punti

Tempo: 60 minuti

Soglia sufficienza: 5 punti (voto 6)