

Year 9 Science Task 3

- Do **not** write on this question paper.
- Write all your answers in the **answer booklet**.

Multiple Choice

1. When a fast-moving star is moving **away** from the Earth, the spectrum will be shifted towards the
 - (A) blue end of the spectrum
 - (B) green end of the spectrum
 - (C) yellow end of the spectrum
 - (D) red end of the spectrum
2. Approximately how many years ago is the big bang thought to have occurred?
 - (A) 13 thousand
 - (B) 13 million
 - (C) 13 billion
 - (D) 13 trillion
3. A pulsar is
 - (A) a radio wave that comes from a star
 - (B) a type of galaxy
 - (C) a rapidly rotating neutron star
 - (D) a galaxy whose centre is so bright it obscures the outer regions
4. The universe expanding from a super-dense and super-hot singularity is known as
 - (A) the Doppler effect
 - (B) Hubble's Law
 - (C) Einstein's equation
 - (D) the 'big bang' theory

5. What is the name of the solution represented by the formula HCl?
- (A) Hydrochloric acid (B) Hydrogen chlorine
(C) Sulfur hydroxide (D) Sulfuric acid
6. Which of the following is an example of a chemical reaction?
- (A) Ice Melting (B) Water Boiling
(C) Magnesium Burning (D) Acid Freezing
7. Chemical reaction that releases energy and increases temperature is known as?
- (A) Exothermic (B) Endothermic
(C) Hotathermic (D) Upperthermic
8. Complete this sentence: "In an ionic bond, electrons "
- (A) disappear (B) are Formed
(C) are Shared (D) are Swapped
9. Which of the following are all types of stars?
- (A) White Dwarf, Red Giant, Twinkle
(B) Red Supergiant, White Dwarf, Pulsar
(C) Red Dwarf, Andre Giant, Black Hole
(D) Supernova, Nebula, Yellow Shine
10. When a star moves away from Earth we call this effect a Red Shift. This is because
- (A) The star appears red in colour
(B) The star is every colour except red
(C) The star heats up
(D) The star reacts faster

Single Word Answer

11. An atomic nucleus is made up of protons and
12. A chemical reaction which absorbs heat is called an reaction.
13. A combustion reaction always has as one of its reactants.
14. The number of waves passing a certain point in each second is called the
15. Our galaxy is called the galaxy.

