1796 – 1955

Germ Theory & Vaccines Quiz

Name _____ Date _____

Fill in the circle beside the best answer.

1. What did Edward Jenner discover in 1796?

- (A) That cholera spread through dirty water, not bad air
- (B) That giving people cowpox protected them from smallpox
- (C) That hand-washing by doctors cut deaths from childbed fever
- (D) That a mold could kill the bacteria growing around it

2. Why was Ignaz Semmelweis's hand-washing discovery ignored by most doctors in 1847?

- (A) Without germ theory, doctors could not believe unseen particles on hands could kill
- (B) Germ theory was already accepted, and doctors thought his idea was nothing new
- (C) His method failed in hospital tests, and deaths in his own ward kept rising each year
- (D) Doctors already used carbolic acid, so they thought hand-washing was not needed

3. What did John Snow's cholera map prove in 1854?

- (A) That cholera spread through contaminated water, not bad air
- (B) That cholera spread through bad air rising from sewers and swamps
- (C) That cholera spread through coughs and sneezes in crowded rooms
- (D) That cholera spread through the bites of fleas carried by rats

4. Why is Louis Pasteur's germ theory considered the most important idea in the history of medicine?

- (A) It showed that life can arise from nonliving matter, which explained spoiled food
- (B) It showed that an imbalance of body fluids causes disease, which led to new diets
- (C) It showed that bad air from rotting waste causes disease, which led to cleaner streets
- (D) It showed that tiny living organisms cause disease, which changed all of medicine

5. What did Robert Koch's work establish beyond identifying specific bacteria?

- (A) The first antibiotic drug, made from a mold found in his own laboratory
- (B) The first vaccine, made by giving patients a mild cattle disease
- (C) Proof that viruses exist and are much smaller than any bacteria
- (D) Rules for proving that a specific microbe causes a specific disease

6. What is penicillin, and how was it discovered?

- (A) The first antiseptic, made on purpose when Lister sprayed carbolic acid in surgery
- (B) The first vaccine, made on purpose when Jenner gave patients a mild cattle disease
- (C) The first antibiotic, found by accident when Fleming saw a mold had killed bacteria
- (D) The first antiviral drug, found by accident when Pasteur saw a mold had killed viruses

7. What disease did the Salk vaccine target, and why was it so feared?

- (A) Cholera, which spread through dirty water in crowded cities
- (B) Polio, which paralyzed tens of thousands of children every year
- (C) Tuberculosis, which damaged the lungs of millions of city workers
- (D) Smallpox, which scarred and killed millions of people every year

8. What is the connection between Jenner's 1796 vaccine and the Salk polio vaccine of 1955?

- (A) Both kill germs already inside the body, so they work as cures after infection
- (B) Both were found by accident when a mold killed the germs in a laboratory dish
- (C) Both expose the body to a harmless form of a germ to build protection in advance
- (D) Both use the cowpox virus to build protection against a more dangerous disease

1796 – 1955

Germ Theory & Vaccines Quiz: Answer Key

1. **B** That giving people cowpox protected them from smallpox

2. **A** Without germ theory, doctors could not believe unseen particles on hands could kill

3. **A** That cholera spread through contaminated water, not bad air

4. **D** It showed that tiny living organisms cause disease, which changed all of medicine

5. **D** Rules for proving that a specific microbe causes a specific disease

6. **C** The first antibiotic, found by accident when Fleming saw a mold had killed bacteria

7. **B** Polio, which paralyzed tens of thousands of children every year

8. **C** Both expose the body to a harmless form of a germ to build protection in advance