Disease and Immunity Exam Topics
Summative Assessment

Traffic Light: Use the colors red, yellow and green to identify how you feel about the following topics. Highlight topics in GREEN if you feel comfortable with it, YELLOW if you have some doubts about it and RED if you have no idea and need to seek help. Use the Grade 10 Biology Diseases and Immunity libguide to help you study: https://bit.ly/2DHnHb7

Scientist Spotlight:
- Edward Jenner
- World Health Organization: started worldwide campaign to immunize people against smallpox

Transmissible Diseases:
- Prokaryotic cells
- Microorganisms: parasites
- Pathogens and antigens
- Bacteria: E. Coli, binary fission, cholera, gonorrhea
- Viruses: lytic vs. lysogenic cycles, influenza, polio, shingles
- Fungi
- What is “Superbugs” and their dangers

Direct and Indirect transmission
- Physical contact
- Air (sneezes/coughing)
- Surfaces
- Vectors: Insect Bites

Immune System:
- Mechanical barriers
- Chemical barriers
- Innate immunity: skin, stomach acid, mucus in nose and lungs, phagocytes, inflammatory response, macrophages, phagocytes
- White blood cells
- Macrophages: Memory cells
- Phagocytes (phagocytosis) http://www.kscience.co.uk/animations/phagocyte.htm
- Lymphatic system: B Lymphocytes (antibodies),
- Lymph capillaries: Lymph fluid, lymph nodes
- Bone marrow: T cells
- Thymus
- Artificial Immunity: antibodies (lock and key model)
- Passive Immunity: mother’s blood passes the placenta
- Heard Immunity

Autoimmune diseases:
- Type 1 diabetes

Controlling Spread of Disease
- Hygiene
- Sanitary food preparation
- Correct Waste Disposal
- Vaccination https://youtu.be/lXMc15dA-vw
- Vaccination Boosters