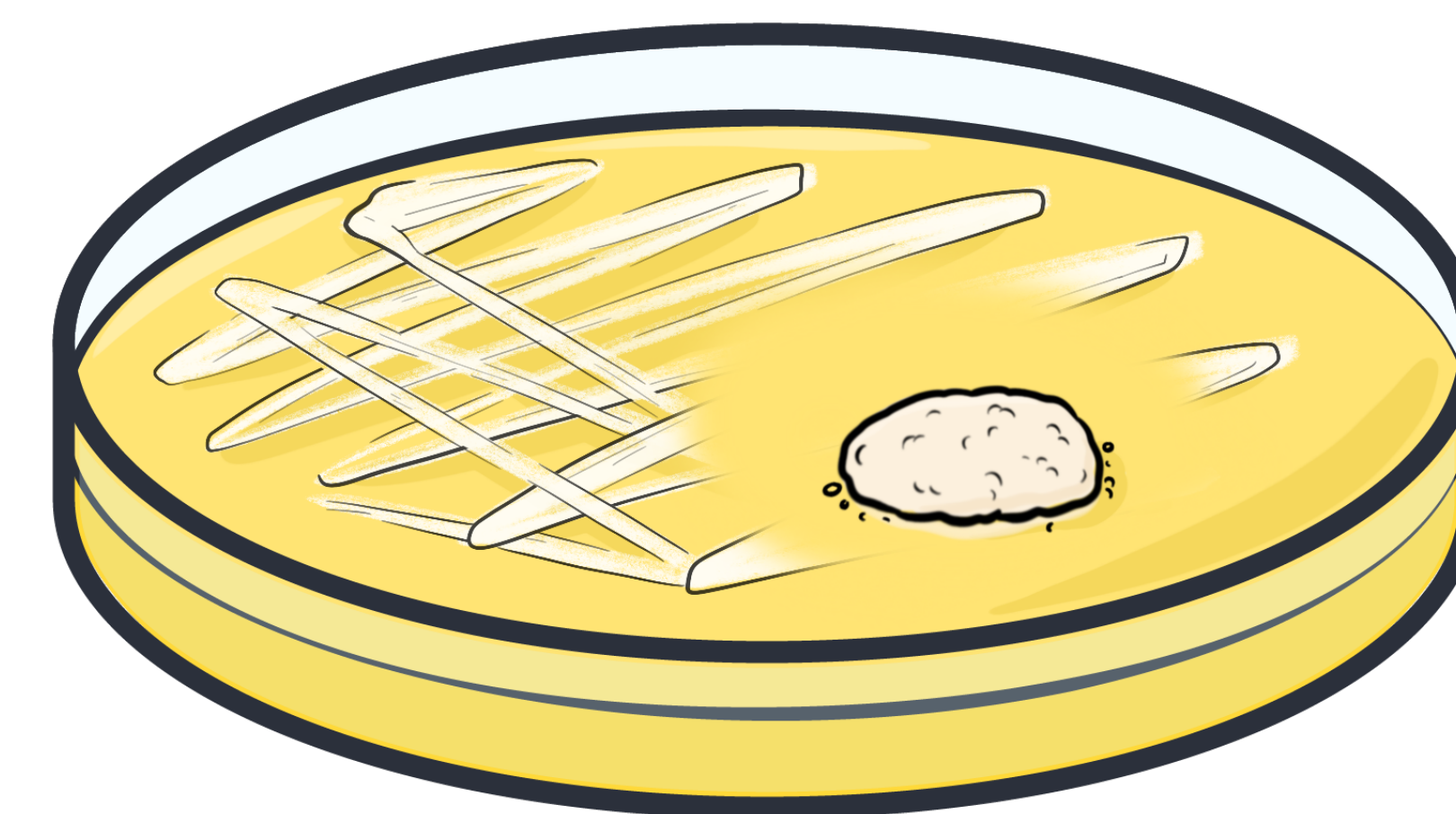


TOPIC: INTRODUCTION TO ANTIMICROBIAL DRUGS

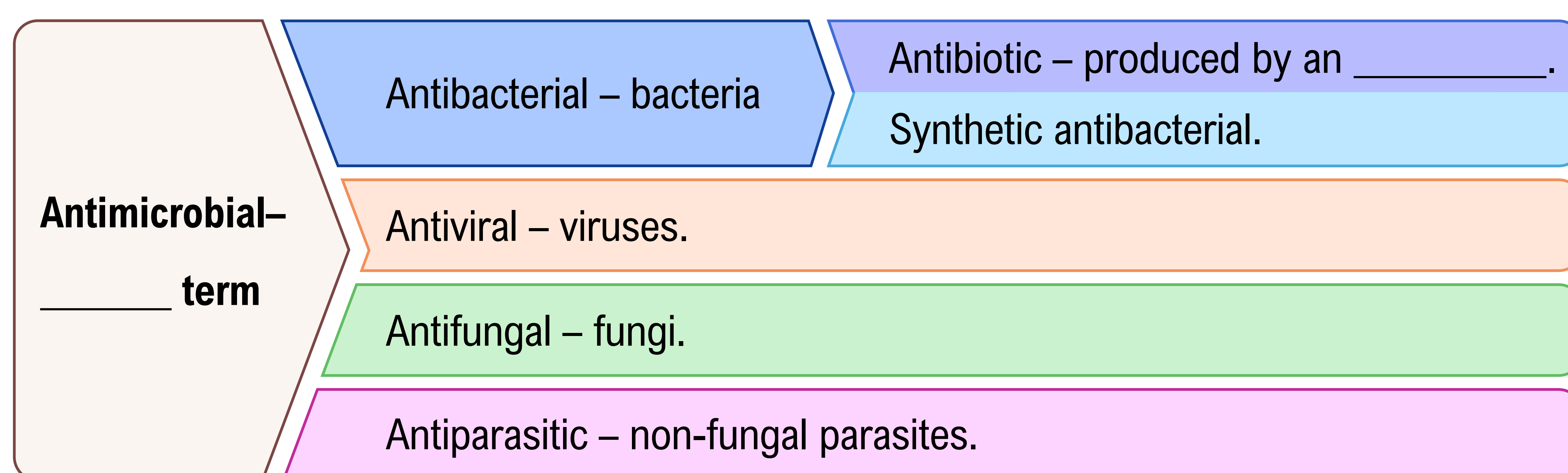
History of Antimicrobial Drugs

◆ **Selective toxicity:** toxic to target organism (_____) but NOT host (_____).

- *Paul Erlich:* early 1900s, introduced idea of “Magic _____”;
 - Developed first antimicrobial – cure for _____.
- *Alexander Fleming:* discovered _____ 1928 - first widely used in _____.
 - _____ growth inhibited bacteria on a petri plate.
- Today, effectiveness of antimicrobials is threatened because of _____.



◆ _____: any chemical-based medicine (today usually reserved for _____).



PRACTICE

Alexander Fleming is most famous for:

- The phrase “Magic Bullet”, which refers to a molecule that could kill microbes selectively.
- The discovery of the first antimicrobial drug.
- Developing a cure for syphilis.
- Discovering the drug penicillin, produced by *Penicillium* mold.

PRACTICE

Which of the following statements is correct?

- The word “chemotherapy” technically describes any chemical-based medicine, but the term is usually reserved for antimicrobials.
- The term “antimicrobial” is reserved for drugs that are effective against non-bacterial pathogens.
- The term “antibiotic” technically means that the drug is produced by an organism but is usually used to mean any antibacterial drug.
- “Antibacterials” are chemicals used for disinfecting surfaces and objects, while “antibiotics” refer to drugs that kill bacteria.