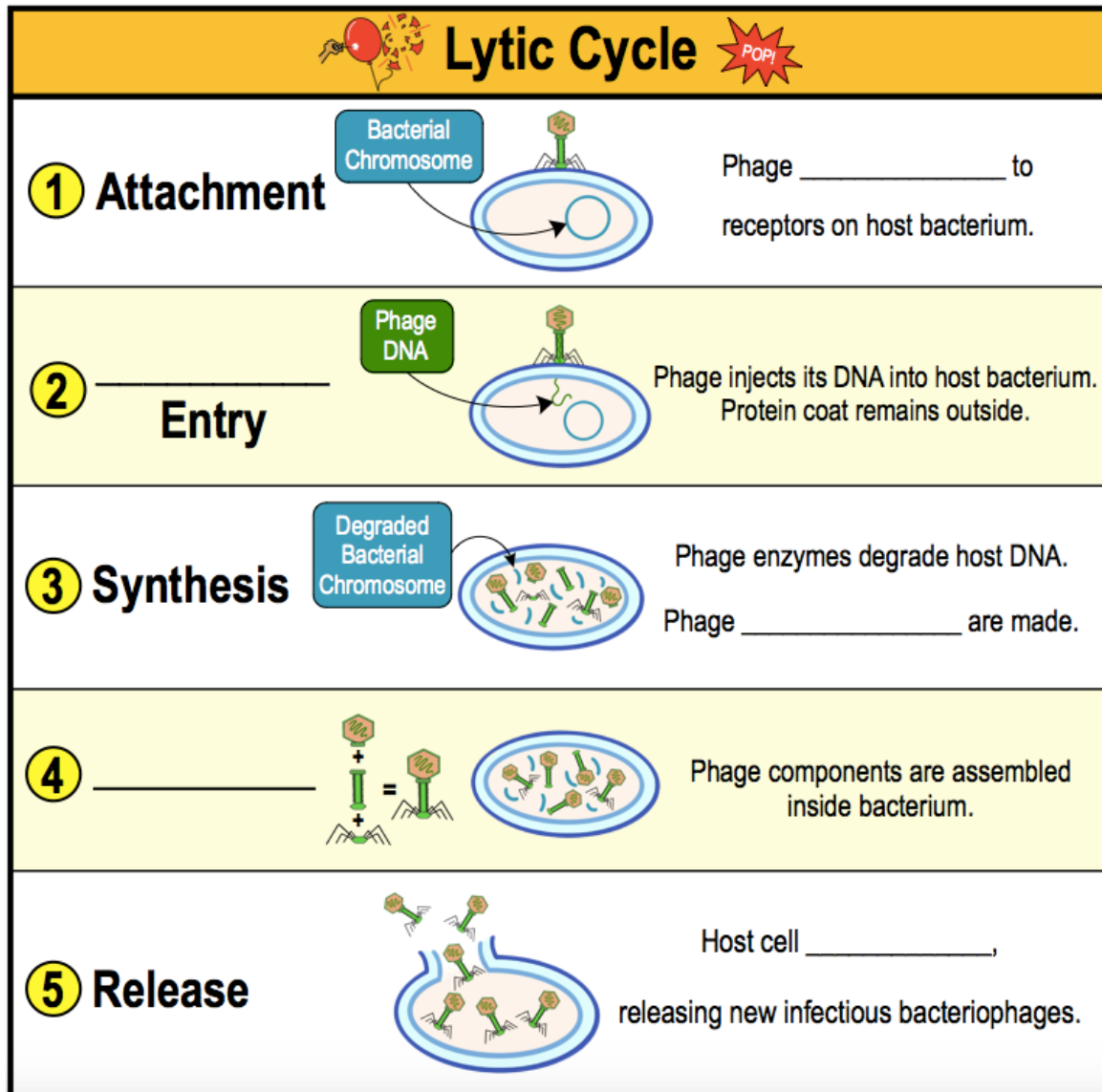


CONCEPT: BACTERIOPHAGE: LYTIC PHAGE INFECTIONS

● **Lytic cycle:** productive infection allowing for lytic phage *reproduction* that results in _____ of the host cell.

□ Occurs in a series of _____ steps:



PRACTICE: Which is NOT a step in a lytic phage reproductive cycle?

- a) Packaging of the phage's cytoplasm.
- b) Recognition and attachment to the host cell.
- c) Phage gene expression.
- d) Assembly of new phages.
- e) Entry of the phage genome.

CONCEPT: BACTERIOPHAGE: LYTIC PHAGE INFECTIONS

PRACTICE: Which of the following statements about the bacteriophage lytic cycle is *false*?

- a) The lytic cycle is a productive infection which results in the host cell's death.
- b) The lytic cycle results in the host cell lysing and new bacteriophages emerging.
- c) In the lytic cycle the host cell's "machinery" is used to create new viral components.
- d) In the lytic cycle the viral genome is incorporated into the host's genome.

PRACTICE: Which of the following statements about the lysogenic cycle of a bacteriophage is true?

- a) A bacteriophage in the lysogenic cycle will kill the host cell by causing cell lysis.
- b) A bacteriophage in the lysogenic cycle can transition into the lytic cycle.
- c) A bacteriophage in the lysogenic cycle is a productive form of viral infection.
- d) A bacteriophage in the lysogenic cycle degrades the host cell's genome.