

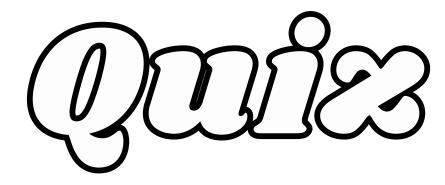
How is apoptosis involved in normal embryological development?

- A )Apoptosis removes parts of the parent DNA from the embryo.
- B) Apoptosis is used to provide nutrients to developing cells.
- C )Overall brain development is inhibited by apoptosis to keep the embryo safe.
- D )Unnecessary parts of the body that normally develop in the embryo are removed with apoptosis.

Which of the following statements accurately compares apoptosis with necrosis?

- A) Apoptosis results in cell rupture, which releases intracellular contents, while necrosis does not.
- B) Both apoptosis and necrosis are important tools in embryological development.
- C) Both apoptosis and necrosis are triggered as the result of physical cell injury.
- D) Necrosis causes an inflammatory response, but apoptosis does not.





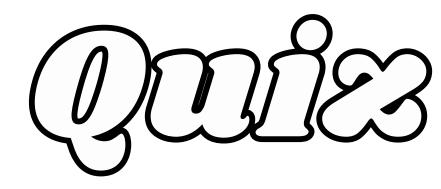
Which of the following are functions of apoptosis? Choose all answers that apply:

- A) Shape organs during development
- B) Allow cells to die in a controlled manner
- C) Divide cells into two identical daughter cells
- D) Maintain immune system balance

Give the correct sequence of apoptosis:

- 1. Nucleus begins to break
- 2. Nucleus condensation and formation of bleb
- 3. Phagocytosis of apoptotic bodies
- A)1, 2, 3
- B)2, 3, 1
- C)3, 2, 1
- D)2,1,3





What could be the cause for a cell to undergo apoptosis?

- A)DNA Damage
- B) Nutrient deficiency
- C)Radiation
- D) All of the above

Apoptosis can't kill which of the following?

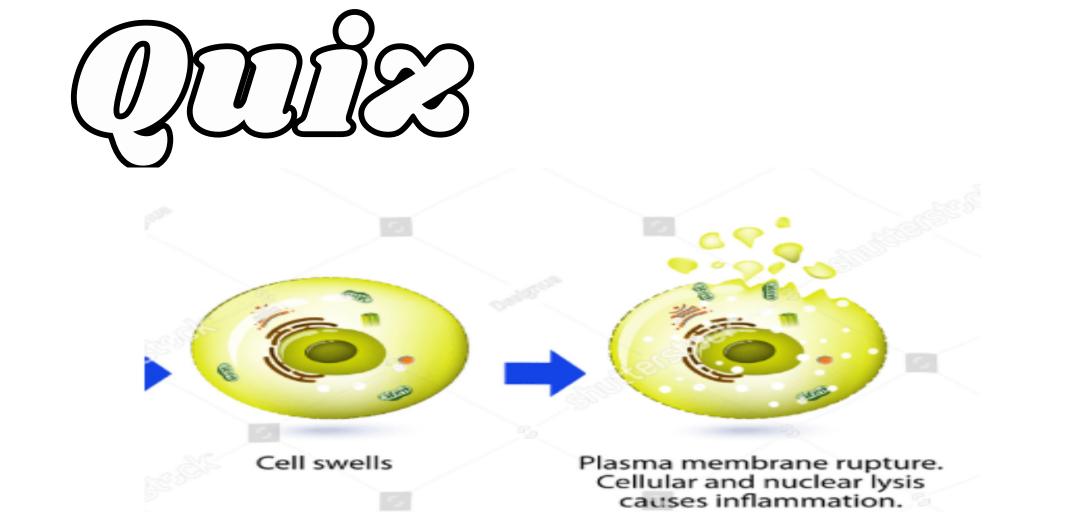
- A)Cell infected with viruses
- B)Cell with DNA damage
- C)Cancer cells
- D)Immune cells



Observe the given diagram: Is it apoptosis?

Yes.

No.



Which of the following cell organelle actively participates in animal apoptosis?

- A)Nucleus
- B)Mitochondria
- C)Lysosomes
- D) Vacuoles



## (I) MES

What is Apoptosis?

A)Cell programmed Death

B)Inflammation of cell

C)Phagocytosis

D)Plasmolysis

Which is correct? (2)

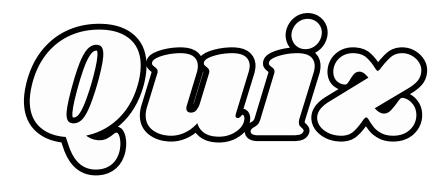
A)Necrosis is uncontrolled cell death

B)Necrosis is programmed cell death

C) Apoptosis is uncontrolled cell death

D) Apoptosis is programmed cell death





Caspases need to be cleaved to initiate apoptosis

True

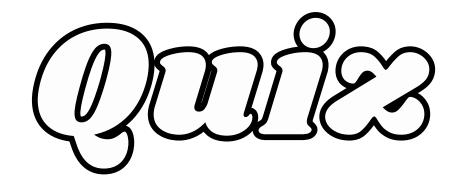
False

Select the most correct response:

Mitochondria are involved in:

- A)Intrinsic apoptosis
- B)Extrinsic apoptosis
- C)Cellular Apoptosis
- D)Signal transduction of apoptosi





Why is apoptosis required?

A)Glycolysis

B)Cell division: Meiosis and mitosis

C)Growth and elimination of threats such as

viruses and DNA damage



- 1)D
- 2)D
- 3)A/B/D
  - 4)D
  - 5)D
  - 6)C
  - 7)No
    - 8)B
  - 9)A
  - 10)A/D
  - 11)True
    - 12)A
    - 13)C

## (I) MES

