

Fifth Grade “Life Cycles and Reproduction” Assessment

1a. A life cycle is the development of an organism from birth to growth, reproduction and then _____.

1b. What are the stages of a life cycle?

1c. Explain the life cycle of a human through its growth stages.

2a. All living things reproduce themselves. Reproduction can be either _____ or sexual.

2b. What are the two types of reproduction?

2c. What is the difference between asexual and sexual reproduction?

3a. Give one example of asexual reproduction.

3b. Give two examples of asexual reproduction.

3c. Give three examples of asexual reproduction.

4a. _____ requires the joining of special male and female cells, called gametes, to form a fertilized egg.

a. asexual reproduction

b. sexual reproduction

4b. _____ requires the joining of special male and female cells, called gametes, to form a fertilized egg.

4c. Describe the process of sexual reproduction:

5a. What is the male reproductive organ called?

5b. What are the testes?

5c. What is the relationship between the testes and sperm?

6a. What is the female reproductive organ called?

6b. What are the ovaries?

6c. What is the relationship between the ovaries and eggs?

7a. When the sperm and egg join outside the bodies of the parents, the process is called _____.

7b. What is external fertilization?

7c. Give an example of external fertilization and describe the process.

8a. When sperm and egg join inside the body of the female, it is called

8b. What is internal fertilization?

8c. Give an example of an animal that reproduces through internal fertilization and describe the process.

9a. Fill in the missing stages of embryo growth:

_____, Zygote, _____, Fetus,

9b. List the stages of embryo growth.

9c. Name and explain the stages of embryo growth.

10a. What is a female gamete?

embryo egg fetus newborn zygote

10b. What is a female gamete?

10c. What is the difference between an egg and a zygote?

11a. What is a fertilized egg called?

embryo egg fetus newborn zygote

11b. What is a fertilized egg called?

11c. Explain how a zygote becomes an embryo.

12a. What is the developing organism called in the uterus?

embryo egg fetus newborn zygote

12b. What is the developing organism called in the uterus?

12c. Explain how the embryo develops.

13a. What is the embryo called after all major body structures have formed?

embryo egg fetus newborn zygote

13b. What is the embryo called after all major body structures have formed?

13c. Describe the difference between a fetus and a newborn.

14a. What is the fetus called when it has developed enough to live on its own and is born?

embryo egg fetus newborn zygote

14b. What is the fetus called when it has developed enough to live on its own and is born?

14c. Compare and contrast a newborn human to a newborn horse.

The following Colorado Model Content Standards are covered in this assessment by the questions indicated:

Questions 1a, 1b, 1c, 2a, 2b, 2c, 3a, 3b, 3c, 4a, 4b, 4c, 7a, 7b, 7c, 8a, 8b, 8c, 9a, 9b, 9c, 10a, 10b, 10c, 11a, 11b, 11c, 12a, 12b, 12c, 13a, 13b, 13c, 14a, 14b, 14c: Standard 5-8.3.3.c describing the growth and development of several organisms

Questions 5a, 5b, 5c, 6a, 6b, 6c: Standard 5-8.3.3.d describing the structures and functions of human body systems

Answer Key

- 1a. death
- 1b. Acceptable answers could include:
-a life cycle is the development of an organism from birth to growth, reproduction and then death
- 1c. Acceptable answers could include:
-the life cycle of a human is as follows: embryo, fetus, newborn, infancy, childhood, adolescence, adulthood, old age, death
- 2a. asexual
- 2b. asexual and sexual
- 2c. Acceptable answers could include:
-The difference between asexual and sexual reproduction is in asexual reproduction is without using males and females. The organism simply makes copies of itself through cell division. In sexual reproduction you join male and female cells called gametes to form a fertilized egg.
- 3a. Acceptable answers could include:
-fission (splitting of bacteria), spores from mildews, molds, and mushrooms, budding of yeast cells, regeneration, and cloning
- 3b. Acceptable answers could include:
-fission (splitting of bacteria), spores from mildews, molds, and mushrooms, budding of yeast cells, regeneration, and cloning
- 3c. Acceptable answers could include:
-fission (splitting of bacteria), spores from mildews, molds, and mushrooms, budding of yeast cells, regeneration, and cloning
- 4a. sexual reproduction
- 4b. sexual reproduction
- 4c. Acceptable answers could include:
-The process of sexual reproduction requires the joining of special male and female cells called gametes, to form a fertilized egg which then results in a baby animal, called a zygote.
- 5a. testes (sperm)
- 5b. Acceptable answers could include:
-the two organs in the male reproductive system that produce sperm and testosterone
- 5c. Acceptable answers could include:
-the relationship between testes and sperm is the sperm or male gametes are produced in organs called the testes
- 6a. ovaries (egg)
- 6b. Acceptable answers could include:
-the paired organs in the female reproductive system that produce ova (eggs) and release the hormone estrogen

- 6c. Acceptable answers could include:
-the relationship between ovaries and eggs is that eggs or female gametes, are produced in organs called the ovaries
- 7a. external fertilization
- 7b. Acceptable answers could include:
-this is when the sperm and egg join outside the bodies of the parents
- 7c. Acceptable answers could include:
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-Spawning is an example of external fertilization. During spawning season, adult fish release eggs and sperm into the water where fertilization takes place.
- 8a. internal fertilization
- 8b. Acceptable answers could include:
-when sperm and egg join inside the body of the female
- 8c. Acceptable answers could include:
-Birds and mammals are examples that reproduce through internal fertilization. The female releases an egg from her ovary and it travels down a tube that leads to the ovary. During mating sperm reaches the egg and fertilizes it.
- 9a. egg, embryo, newborn
- 9b. egg, zygote, embryo, fetus, newborn
- 9c. Acceptable answers could include:
-Once the egg is fertilized, it is called a zygote. The zygote begins to divide and grow, and after several days or weeks, depending on the animal, the zygote becomes an embryo. An embryo is a developing organism in the uterus of the mother's body. It gets its food and water from the mother. In the later stages of development, the embryo is called a fetus. When it has developed enough to live on its own, the fetus is born and called a newborn.
- 10a. egg
- 10b. egg
- 10c. Acceptable answers could include:
-an egg is the female reproductive part and once the egg becomes fertilized from the sperm it becomes the zygote
- 11a. zygote
- 11b. zygote
- 11c. Acceptable answers could include:
-A zygote travels down the tube from the ovary, enters the uterus, and attaches itself to the wall of the uterus. In the uterus the developing zygote becomes an embryo that gets its food and water from the mother.
- 12a. embryo
- 12b. embryo

- 12c. Acceptable answers could include:
-The embryo develops inside the mother's uterus where it receives food and water from the mother.
- 13a. fetus
13b. fetus
13c. Acceptable answers could include:
-The difference between a fetus and a newborn is that the fetus is still inside the mother's uterus and the newborn is outside the mother.
- 14a. newborn
14b. newborn
14c. Acceptable answers could include:
-Development happens inside the mother in both humans and horses. Once a fetus is born, the mother cares for it by giving it milk. A major difference between human and horse newborns is that after a year a horse no longer needs its mother for food and then in four years the horse is fully mature.