Reproduction, Day 1: Reproductive System

Special Education: Secondary, Lesson #19

Student Learning Objectives:

To be able to...

- 1. Using appropriate vocabulary, the student will identify parts of the body involved in reproduction.
- 2. Explain the process of fertilization.
- 3. Explain that all species reproduce, that humans come from other humans and that for humans to reproduce, both a male and a female are necessary.

Materials Needed:

Reproduction Transparency
One copy of the *Reproduction Worksheet* for each student

Agenda:

- 1. Introduce topic
- 2. Anatomy and vocabulary
- 3. Fertilization
- 4. The five facts
- 5. Optional additional activities

"Where did I come from?" When students ask about their origins, there is more to be considered than a simple explanation of reproductive biology.

This lesson, along with pregnancy, parenthood, sexual decision making and birth control, provides crucial information for your students, as they consider these topics both objectively and in terms of their own future plans and dreams.

Activities:

"Where do babies come from?"

Use anatomical models obtained from a Public Health Department or a doctor's office or see Appendix I for sources.

1. Introduce today's lesson

Identify the topic of today's lesson as reproduction "Where babies come from"

2. Anatomy & Vocabulary

- A. Review genital anatomy & vocabulary from the anatomy lesson. You may want to project the vocabulary and diagram transparencies used in that lesson.
- B. Add the following vocabulary words and concepts. Project the Reproduction Transparency, covering the five facts, and discuss the definitions:

sperm: the cell from a man's body that can start a pregnancy if it fertilizes an egg cell from the woman's body

egg: the cell from a woman's body that can start a pregnancy (also known as ovum) if it is fertilized by a sperm cell from the man's body

3. Fertilization

- A. Explain that when sperm and egg meet and start a pregnancy, it is called fertilization (add fertilization to the vocabulary lists).
- B. Since the actual egg and the sperm are so tiny and hard to see, it may be difficult for students to visualize this process. One approach to helping your students visualize egg and sperm and the process of fertilization is to simply draw them on the board or onto the transparency. An egg looks like a circle. "It is much larger than a sperm. The egg is visible with the naked eye. It is about the size of a period at the end of a sentence." (Have students find a period on a page in their book).



"A sperm is like a small circle with a tail on it. It's so tiny, you can't see it without a microscope."



4. The Five Facts

A. Discuss the first fact

All species reproduce. Humans come from other humans. Kittens come from cats. Puppies come from dogs. People come from people. Reinforce this concept by asking the class, "Where do come from?

These five facts can be taught in many ways. Use discussion, roleplay, diagrams on the blackboard – any approach that will meet specific students' needs.

Class response should be "from other_____"
Use any species you can think of, or refer to this list: goldfish, rabbits, deer, mice, flies, snakes, ants.

B. Discuss the second fact.

For humans, it takes both a male and a female to reproduce.

More detail: "And they can't be little kids. They have to be old enough to make sperm and eggs. How old is that? ... Right, they have to have gone through puberty. We'll talk another day about how old a person ought to be to be a GOOD parent, but in order to make a baby, all you need is a sperm and an egg."

C. Discuss the third fact.

Sperm comes from males.

More detail: "Sperm comes from the testicles, out of the man's penis when he ejaculates. (sperm can NOT come out when the man urinates or "goes pee")

D. Discuss the fourth fact.

Eggs come from females.

More detail: "The egg comes from the woman's ovary into a tube that leads to the uterus."

E. Discuss the fifth fact.

Sperm + egg = pregnancy

Usually, the male puts his penis into the female's vagina and lets the sperm out (ejaculation). When a sperm joins with an egg, a pregnancy starts.

More detail: "If the man's penis is inside the woman's vagina (if they are having sexual intercourse) and he ejaculates, sperm can travel into the woman and might meet an egg in the tube. If a sperm meets an egg and they connect then the egg goes to the uterus and a baby starts to grow there. A pregnancy has begun."

Depending upon your students' abilities, and especially if you have a student who you know was born via reproductive technology (donated sperm or egg, in vitro fertilization, etc.), make sure to explain the exceptions.

"When a sperm and an egg meet in the woman's body and start a baby."

F. Summary Ask:

"Where do babies come from?"

Project the Reproduction Transparency and give each student a copy of the Reproduction Handout. Use this to summarize. Clarify as necessary.

5. Optional Additional Activities

- A. Explore the development of twins both fraternal and identical
- B. Discuss the development of the fetus (using diagrams from resource books, brochures, fetal development models or the marvelous NOVA film "The Miracle of Life").

"When a sperm and an egg meet in the woman's body and start a baby."

Dear Trusted Adult,

"Where did I come from?" Students will be answering that question for themselves during the next few classes.

The following information was presented in class today, along with a discussion of public (adult medical) vocabulary terms for reproductive system parts.

- 1. All species reproduce. Humans come from other humans. Kittens come from Cats. Puppies come from Dogs. People come from People.
- 2. For humans, it takes both a male and a female to reproduce.
- 3. Sperm comes from males.
- 4. Eggs come from females.
- 5. Usually, the male puts his penis into the female's vagina and lets the sperm out (ejaculation). When a sperm joins with an egg, a pregnancy starts.

You can support this learning by:

- Reviewing the information presented
- If a friend or relative is currently pregnant, discuss the pregnancy in terms of these newly learned concepts.
- If you know someone whose pregnancy began another way (with donated sperm, for instance), discuss that there are exceptions.

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Sincerely,		
Teacher, Principal or Nurse	 	

If you have any questions or comments, please call me.

NOTE: All Trusted Adult Exercises are Optional.

Reproduction Handout

Vocabulary

Egg:

the cell from a woman's body that can start a pregnancy (also known as ovum) if it is fertilized by a sperm cell from the man's body



Sperm:

the cell from a man's body that can start a pregnancy if it fertilizes an egg cell from the woman's body



Five Facts

- 1. All species reproduce.
 - Humans come from other humans.
 - Kittens come from cats.
 - Puppies come from dogs.
 - People come from people.
- 2. For humans, it takes both a male and a female to reproduce.
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Reproduction Transparency

Vocabulary

Egg

Sperm

Five Facts

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