

Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences –particularly students of color and girls – by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

explore the female reproductive system, how it works and what its made of



Supplies Required:

Pen Journal Index cards Your Growing Body & Remarkable Reproductive System

Video

Learn about the female reproductive system: https://www.youtube.com/watch?v=paJld0HA1mk

Overview

Reproduction is one of the most unique processes in living organisms and is essential for any sqecies to survive. Both male and female humans have specific reproductive systems built with specific components which allow for reproduction to occur.

The female reproductive system is located in the pelvic region. Organs within the female reproductive system include the uterus, falllopian tubes, ovaries, cervix, and vagina. Ovaries contain thousands of eggs or ovum, which contain pieces of your genetic code and DNA, which can be passed to any future children you may have. While a female is born with all of her eggs, nothing generally happens with them until she matures and goes through puberty. Once a female goes through puberty, one (or occassionally more than one) egg is released from the ovary. It travels down your fallopian tube to your uterus. Throughout this time, which lasts about 2 weeks, hormones in your body tell your uterus to line with blood awaiting the egg. At the end of the cycle, which lasts about a month, if the egg is not fertilized, your body sheds the blood that lines your uterus. This process is called menstruation. More commonly, you may know it as getting your period.

If the ovum meets sperm in the fallopian tube, fertilization can occur. The fertilized eggs travels down the fallopian tube the same way it would on any other month. However, your body recognizes a fertilized egg and will produce a hormone called progesterone to tell your body to not start the process of menstruation. Instead, the egg will make it's home in your uterus and begin to grow into a baby, which after approximately 38 weeks is naturally delivered out of the cervix and vagina.

Instructions

- Watch the video and click the links provided under "additional resources" to explore the female reproductive system. Find additional resources, as needed, to complete the instructions below.
- Create Flashcards of reproductive system parts and how they work.
- Draw a diagram and label parts. 3.
- What is reproduction?
- Name three parts of the reproductive system.
- Describe the vagina and its reproductive functions.
- Outline the structure and basic functions of the uterus.
- 8. What is the endometrium? How does it change during the monthly cycle?
- 9. Relate features of the Fallopian tubes to the functions of these structures.
- 10. Define an ovary.
- 11. Identify the functional units of the ovaries.
- 12. Discuss the timing of egg production and ovulation in the context of a female's lifetime.
- 13. Take time to journal and reflect on the amazing things of which your body is capable! Think about the women in your life and those that inspire you to be the best version of yourself. How might you show appreciation for yourself and the women in your life? Can you make these things part of your routine? We all win when women build eachother up, not tear each other down!

Additional Resources

- 1. Learn about the female reproductive body parts and what they do: https://tinyurl.com/ybuvdgin
- 2. Another video on the female reproductive system: https://tinyurl.com/y5gjvn46
- 3. Meet 10 young women who are changing the world: https://tinyurl.com/y2v86l6u

Share It Out

Girls run the world! Find an article or piece of work (e.g. song, poem, art, etc.) online by a woman who inspires you. What goals do you have for your future? What types of female role models do you want to see more of in the world?

Share on social media: tag the woman who inspires you on social media and share what you love about them! What message of positivity do you want to share with the world? Share your thoughts about being a strong young woman with the hashtags:

#WomenSupportingWomen #StrongWomen #STEMatHome #ProjectExploration

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!







