



POSTVISIT ACTIVITY
for "Body Systems Pathway"

GRADE LEVEL
Grades 7–12

CDE STANDARDS
Science: 3.3

PREPARATION
Estimated Preparation Time: 30 minutes
Estimated Activity Time: 30–45 minutes

MATERIALS
Reproductive System Outburst game
cards
Cardstock

Reproductive System Outburst

Learning Goals/Objectives

Students will

- identify important concepts relating to the reproductive system.
- identify important concepts relating to human development.

Advanced Preparation

1. Copy the Reproductive System Outburst game cards on cardstock for small groups of students.
2. Cut out each card to place in a playing card deck for each group of students.
3. You may wish to laminate these cards so they will last longer.
4. Divide students into small groups or pair students with partners to discuss facts and play the game.

Classroom Activity

1. This game will be best played when students have knowledge about the reproductive system and human development.
2. Provide a set of game cards to each small group of students.
3. Instruct students that the object of the game is to name as many of the answers on the card in the time allowed.
4. One student will be the category giver. They will read the category to their team and start the clock. The team will begin shouting out as many answers as they can in the time allowed.
5. Student teams are given one point for each correct answer. The team with the most points at the end of the game wins.

Variations/Extensions

1. Have students create their own Outburst cards for human development past birth.
2. Ask students to develop an additional game or alternative way to use the facts on the cards. When they have developed their game and its rules, have them teach it to a small group of students.

Resources

WEB SITES

Kids Health for Parents

http://kidshealth.org/parent/pregnancy_newborn/pregnancy/newborn_variations.html

Medline Plus

<http://www.nlm.nih.gov/medlineplus/pregnancyandreproduction.html>

How Stuff Works

<http://science.howstuffworks.com/human-reproduction.htm>

FIRST TRIMESTER

Blood type determined	Heart beats
Facial features visible	Fingers can be seen
Vocal cords developed	Brain fully formed
Baby teeth developing	Backbone forming
Major muscles developed	Fetus moves

FETAL EXAMINATION METHODS

Chorionic Villus sampling	Ultrasound
Fetal heart monitoring	Blood tests
Amniocentesis	Ultrasonograph
Routine physicals	Sonogram

SECOND TRIMESTER

Mother feels fetus move	Lanugo on body
Eyelashes form	Sex organs appear
Fetus can hear mother	Fingernails appear
Fingerprints develop	Eyebrows appear
Body systems develop rapidly	Eyelids open

MALE REPRODUCTIVE SYSTEM

Testes	Scrotum
Penis	Vas deferens
Epididymis	Seminal vesicles
Seminiferous tubules	Foreskin
Urethra	Glans

THIRD TRIMESTER

Skin covered by vernix	Lanugo is shed
Fetus practices breathing	Skull bones soft
Fetus sleeps 95% of day	Fetus can survive
Skin smoothing out	Heart rate is rapid
Fat is forming	
Digestive system makes waste	

FEMALE REPRODUCTIVE SYSTEM

Uterus	Vagina
Ovary	Cervical canal
Fallopian tubes	Fimbriae
Endometrium	Myometrium
Cervix	Oviduct

WHAT TO DO IF YOU THINK YOU'RE PREGNANT

See your doctor	Do not diet
Eat healthy	Exercise
Continue working	Do not take drugs
Stop smoking	Tell your dentist
Stop drinking alcohol	Avoid hot tubs

BLASTULA

Hollow	Fluid-filled
Ball of cells	One week
Developing embryo	Cell division
Cleavage of ovum	Attaches to uterus

STAGES OF DEVELOPMENT

Ovum	Sperm
Zygote	Morula
Blastula (Blastocyst)	Embryo
Fetus	Infant

SPERM

Semen	Seminal fluid
Male gamete	Three parts
Head	Basal body
Gender determination	Genetic information
Spermatozoa	Tail

OVUM

Female gamete	Genetic information
Nucleus	Yolk
Ovary	Fallopian tube
Ootid	Egg cell
Ovule	Largest cell

ZYGOTE

Fertilization	Sperm
Ovum	Diploid
Cleavage	Single cell

FERTILIZATION

Union	Sperm
Zygote	Ovum
12 to 48 hours	Ovulation
Fallopian tube	Semen
Chromosomes match	Penetrate

LABOR & DELIVERY

Braxton Hicks	Contractions
Afterbirth	Umbilical cord
Breech	Caesarean Section
Cervical dilation	Pushing
Birth canal	Water breaks

CHANGES IN PREGNANT WOMEN

Heart gets larger	Uterus enlarges
Blood volume increases	Stretch marks
Waist gets larger	Skin darkens
Breasts enlarge	Nipples leak
Gentle contractions of uterus	Water retention

A NEWBORN BABY

Covered in vernix	Sucking reflex
Head slightly pointed	Jaundice
Crying	Myconium
Apgar scores	Grasp reflex
Lanugo	Startle response