

*Best example*

**HED 325**

**Project #3 -- Fall 2010**

**Test Development and Analysis**

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Sex and Family Life Unit-Puberty and the Reproductive System-Class Objectives:

Student will be able to:

- 1. Label the basic structure of the reproductive system**  
#9, 10, 12, 13, 15, and 16
- 2. Describe the basic functions of the reproductive system**  
Male and Female Anatomy #26-35
- 3. Understand puberty and its physical, mental, and emotional changes**  
#8, 11, 18, 20, 22, and 25
- 4. Identify and recognize trusted individuals that can assist with questions, concerns and problems regarding sexual health**  
#24
- 5. Define and understand components of puberty**  
#1, 4, and 19
- 6. Understand the role of the endocrine system and the hormonal influence on puberty**  
#2, 3, 5, 6, 21
- 7. Understand the basic process of the menstrual cycle in females**  
#7, 14, and 17

## Sex and Family Life Unit – Puberty and the Reproductive System Test

**Multiple choice. There is only one correct answer for each question. Worth 1 point each.**

1. On average, a female begins puberty \_\_\_\_\_ boys.
  - A. 2-3 years before
  - B. 1-2 years before
  - C. 1-2 years after
  - D. At the same time as
  
2. The gland located at the base of the brain that is responsible for producing the hormone that initiates puberty in **both males and females** is:
  - A. Estrogen
  - B. Pituitary
  - C. Progesterone
  - D. Adrenal
  
3. The hormone produced by the **female** that contributes to the physical and emotional changes of puberty is:
  - A. Estrogen
  - B. Pituitary
  - C. Testosterone
  - D. Thyroid
  
4. The second largest growth spurt occurs:
  - A. From birth to one year
  - B. During toddlerhood
  - C. During puberty
  - D. From age 18-25
  
5. The hormone produced by the **male** that contributes greatly to the physical and emotional changes that occur during puberty is:
  - A. Estrogen
  - B. Progesterone
  - C. Testosterone
  - D. Thyroid

6. The chemical produced into the bloodstream that initiates puberty in **both males and females**?
- A. Adrenals
  - B. Thyroid
  - C. Hormones
  - D. Pituitary
7. During the menstrual cycle, \_\_\_\_\_
- A. an egg is released from the female ovaries
  - B. a sperm is released from the female ovaries
  - C. blood and tissue are released from the female ovaries
  - D. hormones are released from the female ovaries
8. A way one could eliminate body odor would be:
- A. Take a shower after sport activities
  - B. Wear deodorant regularly
  - C. Wear clean clothes
  - D. All of the above
9. The **male** urinary and sex organ is known as the:
- A. Scrotum
  - B. Penis
  - C. Testicles
  - D. Urethra
10. The **female** organ which produces sex hormones and egg cells is the:
- A. Uterus
  - B. Vas deferens
  - C. Fallopian tubes
  - D. Ovaries
11. During puberty a **female** will develop all of the following EXCEPT:
- A. Larger breast
  - B. Rounder hips
  - C. Higher blood pressure
  - D. Narrower waist

12. The gland which produces sperm and the male sex hormone is:

- A. Vas deferens
- B. Scrotum
- C. Testicles
- D. Urethra

13. The external pouch that covers the testicles in males is:

- A. Vas deferens
- B. Penis
- C. Testes
- D. Scrotum

14. The process of discharging of blood, tissue and egg from the uterus is called:

- A. Ovulation
- B. Fertilization
- C. Maturation
- D. Menstruation

15. The vagina is:

- A. The pear-shaped organ which the fetus grows and develops until birth
- B. The female ovum-producing gland
- C. The passage from the uterus to the outside of the female's body, also known as the birth canal
- D. The narrow tube that connects the ovaries to the uterus

16. The pear-shaped organ which the fetus grows and develops in until birth is called the:

- A. The uterus
- B. The vagina
- C. The ovary
- D. The cervix

17. Which of the following explains the menstrual cycle?

- A. The egg is released from the ovary, travels down the fallopian tube into the uterus and shed with blood and tissue from the vagina
- B. The egg is released from the uterus, travels down the fallopian tube and shed with blood and tissue from the vagina
- C. The egg is released from the ovary travels down the fallopian tube into the cervix, then enters the uterus where the tissue and blood are shed through the vagina
- D. The egg is released for the ovary, travels down the fallopian tube into the vagina, then to the uterus where the blood and tissue shed through the cervix

18. The name of the gland that produces odor-causing sweat is called:
- A. Endocrine
  - B. Apocrine
  - C. Pituitary
  - D. Sweat
19. The changes that happen during puberty usually happen:
- A. Over night
  - B. Gradually, over a few years
  - C. On your eleventh birthday
  - D. Over a few week time frame
20. During puberty **males** may experience all of the following changes, **EXCEPT**:
- A. Growth of hair on face, arm pits, legs, and pubic area
  - B. Shoulders and chest to become broader
  - C. Waist narrows and hips become wider
  - D. Breast enlargement

**Short answers. Worth 4 points each (Partial credit given for incomplete answer).**

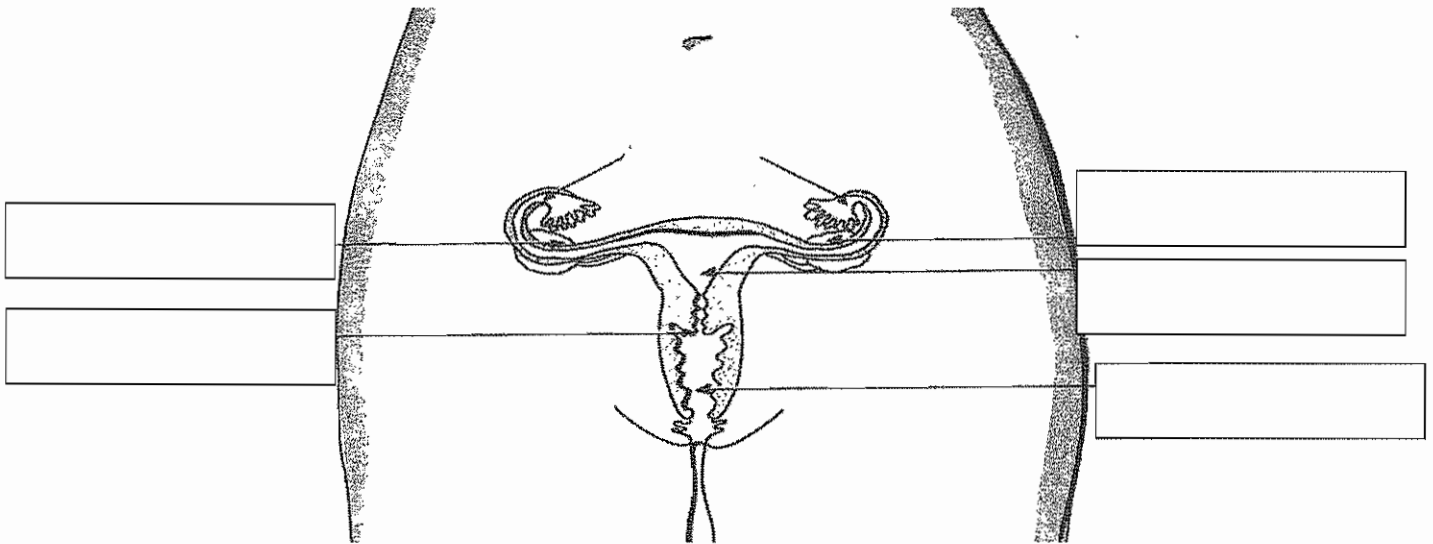
21. What is the pituitary gland and what is its role in puberty?
22. List at least 4 changes that both boys and girls both experience during puberty:  
(Can be emotional, physical, or psychological changes)
23. What is the purpose of the reproductive system?
24. List 3 people that you can go to for information regarding puberty and the reproductive system and explain why it is important to talk to those people you identified.
25. Explain what a growth spurt is and when it occurs in females AND males.

**Matching: Label the following male and female reproductive organs using the word bank below. . Worth 1 point each.**

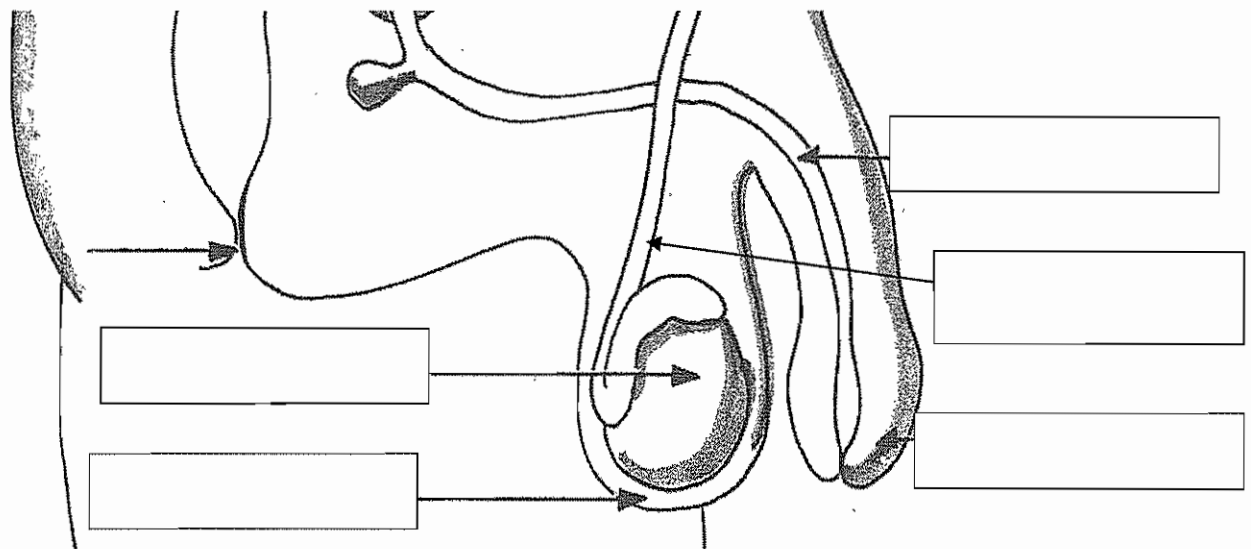
Word Bank:

Penis	Fallopian Tube	Ovary	Uterus	Vagina	Cervix	Testes
Testicle	Prostate gland	Pituitary gland	Urethra	Egg/Ovum	Vas Deferens	

## Female Anatomy Diagram



## Male Anatomy Diagram



Name:

Teacher:

Date:

*Sex and Family Life Unit – Puberty and the Reproductive System Test*

**ANSWER SHEET - All answers must go on this page.**

Multiple  
Choice

1	
2	
3	
4	
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11	
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13	
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18	
19	
20	

Short answer

21	
22	1) 2) 3) 4)
23	
24	1)                      2)                      3)
25	

See back.

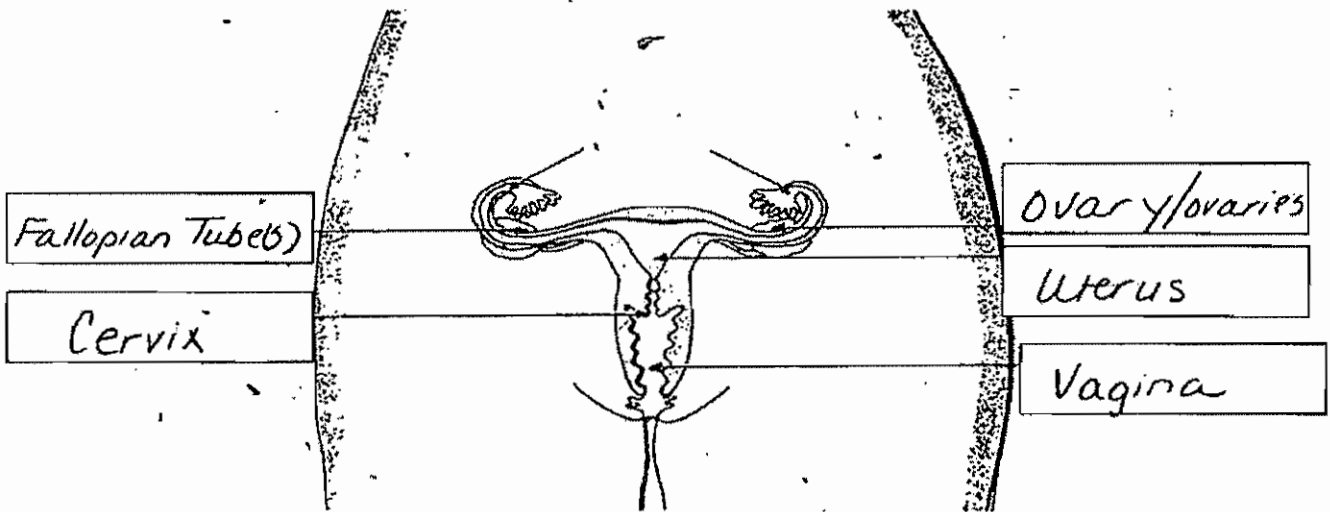


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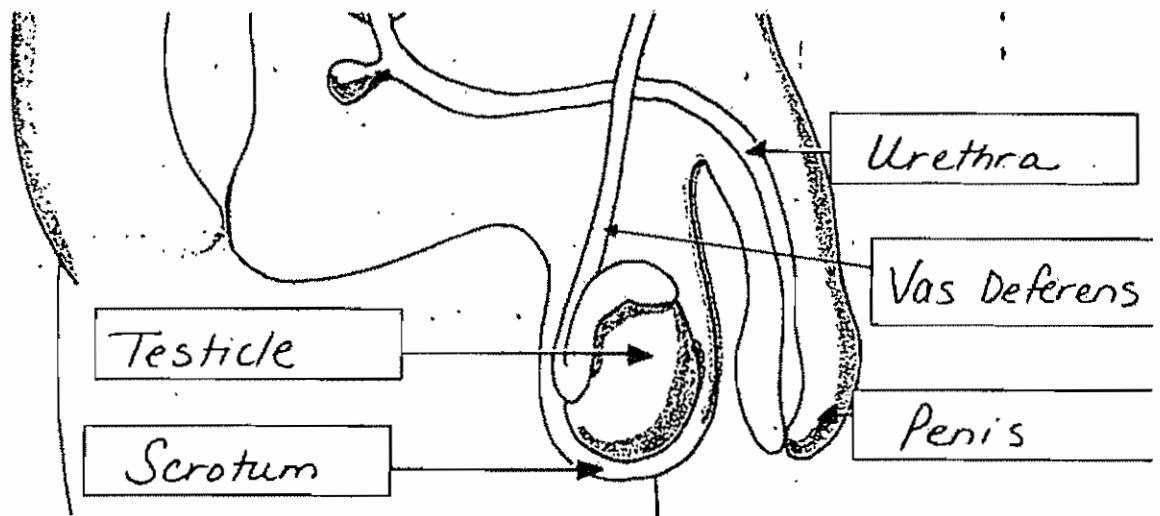
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Penis	Fallopian Tube	Ovary	Uterus	Vagina	Cervix	Testes
Testicle	Prostate gland	Pituitary gland	Urethra	Egg/Ovum	Vas Deferens	

## Female Anatomy Diagram



## Male Anatomy Diagram



Name: *Teacher Answer Sheet* Teacher: \_\_\_\_\_ Date: \_\_\_\_\_

Sex and Family Life Unit – Puberty and the Reproductive System Test

**ANSWER SHEET - All answers must go on this page.**

Multiple Choice	
1	B
2	B
3	A
4	C
5	C
6	C
7	A
8	D
9	B
10	D
11	C
12	C
13	D
14	D
15	C
16	A
17	A
18	B
19	B
20	C

Short answer

21 Small gland located at the base (bottom) of the brain that determines when puberty begins in both girls + boys.  
2pts for location / 2pts for its role

22 Any: 1) Acne hair growth under arms  
2) Perspiration hair growth pubic (private) area  
3) oily skin + hair Interest in opp. sex  
4) growth spurt ↑ need for independence  
mood swings relationships change  
care of what others think change ↑ wt. gain

23 The main purpose of the reproductive System is to reproduce or have children.

24 1) doctor 2) nurse 3) parent  
teacher, counselor, older sibling (trusted)  
Any one responsible answer \*Imp = to get info. from these individuals to get the correct facts, info / +lor truth.

25 A period of extra-rapid growth that occurs during puberty  
2pts - growth 2pts when it occurs



**Directions:**

- 1 This is a test administered to 20 students. The maximum points was 100.
- 2 FIRST Rank all the scores from highest to lowest ON SEPARATE PAGE
- 3 Be sure to keep the student with his/her score.
- 4 Convert ALL scores to whole number (round up to higher value)
- 5 Compute standard deviation values to 2 decimal places. (OTHER THAN CLASS SD)

**ORIGINAL DATA**

Max = 100

Student	Scores	Percent	Standard	Percentile Rank	Stanine Score	Scale Score	Converted Score	Letter Grade
6	78							
5	90							
18	95							
12	89							
16	97							
2	98							
19	73							
8	88							
15	77							
17	70							
14	78							
1	94							
20	74							
9	80							
13	86							
7	94							
10	84							
4	77							
11	67							
3	81							

Cl. Ave 

84
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 whole #  
 Cl. Stdev 

9
---

 whole #

Scale=

300	400	500	600	700
60	70	80	90	100

Student	Scores	Percent	Standard	Percentile Rank	Stanine Score	Scale Score	Converted Score	Letter Grade
2	98	98%	1.56	98	8.1	656	680	A
16	97	97%	1.44	93	7.9	644	670	A-
18	95	95%	1.22	88	7.4	622	650	B+
1	94	94%	1.11	80	7.2	611	640	B+
7	94	94%	1.11	73	7.2	611	640	B+
5	90	90%	0.67	68	6.3	567	600	B-
12	89	89%	0.56	63	6.1	556	590	C+
8	88	88%	0.44	58	5.9	544	580	C+
13	86	86%	0.22	53	5.4	522	560	C
10	84	84%	0.00	48	5.0	500	540	C-
3	81	81%	-0.33	43	4.3	467	510	D+
9	80	80%	-0.44	35	4.1	456	500	D
6	78	78%	-0.67	25	3.7	433	480	D-
14	78	78%	-0.67	18	3.7	433	480	D-
15	77	77%	-0.78	13	3.4	422	470	D-
4	77	77%	-0.78	8	3.4	422	470	D-
20	74	74%	-1.11	3	2.8	389	440	F
19	73	73%	-1.22	0	2.6	378	430	F
17	70	70%	-1.56	0	1.9	344	400	F
11	67	67%	-1.89	0	1.2	311	370	F

Cl. Ave	84	whole #
Cl. Stdev	9	whole #

Scale=

<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>
<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>

	f	cf	cfm	
98	1	20	19.5	97.5
97	1	19	18.5	92.5
95	1	18	17.5	87.5
94	2	17	16	80
90	1	15	14.5	72.5
89	1	14	13.5	67.5
88	1	13	12.5	62.5
86	1	12	11.5	57.5
84	1	11	10.5	52.5
81	1	10	9.5	47.5
80	1	9	8.5	42.5
78	2	8	7	35
77	2	6	5	25
74	1	4	3.5	17.5
73	1	3	2.5	12.5
70	1	2	1.5	7.5
67	1	1	0.5	2.5

**Describe this class in terms of:****1 Percent Distribution**

Range	Number	Percent
90-100	5	25%
80-90	6	30%
70-80	8	40%
60-70	1	5%

20

**2 Standard Deviation**

Ave = 80

SD = 6

Range	SD	#	%
102-111	+3	0	0%
93-102	+2	6	30%
84-93	+1	4	20%
84	0	1	5%
75-84	-1	6	30%
66-75	-2	3	15%
57-66	-3	0	0%

20

**3 Percentile distribution (10 pt. intervals)****Example**

% tiles	Number	Percent	
76-100	4	20%	4th quartile
51-75	5	25%	3rd quartile
26-50	3	15%	2nd quartile
0-25	8	40%	1st quartile

**4 Stanine distribution****Example**

Stanine	Number	Percent
1,2,3	8	40%
4,5,6	7	35%
7,8,9	5	25%

## 5 Scale Score Distribution (50 pt intervals)

Example

Scale Score	Number	Percent
651-700	1	5%
601-650	4	20%
551-600	2	10%
501-550	2	10%
451-500	3	15%
401-450	4	20%
351-400	2	10%
301-350	2	10%

## 6 Converted Score Distribution (50 pt. intervals)

Example

Conv. Score	Number	Percent
651-700	2	10%
601-650	3	15%
551-600	4	20%
501-550	2	10%
451-500	5	25%
401-450	2	10%
351-400	2	10%
301-350	0	0%

## 7 Letter grade distribution (based on percent grade)

Example

Range	Letter Gr	Number	Percent
95-100	A	3	15%
91-94	A-	2	10%
89-90	B+	2	10%
85-88	B	2	10%
81-84	B-	2	10%
79-80	C+	1	5%
75-78	C	4	20%
71-74	C+	2	10%
69-70	D+	1	5%
63-68	D	1	5%
60-64	D-	0	0%

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