

Pig Kidney Teacher Guide

Introduction:

Pig kidneys are a pair of bean-shaped organs located on the dorsal side of the abdomen. One is located on the left side and the other on the right side. The kidneys are part of the urinary tract where blood is filtered and urine is produced. The kidneys are also important for emission and absorption of water in the body.

Worksheet Guide:

Materials needed: *Pig Kidney Model*, *Pig Kidney Quick Start Guide*, *Pig Kidney Worksheet* and *Pig Kidney Worksheet Answer Key*.

Steps for using the *Model* with the *Worksheet*:

Step 1: Have students study the location of the parts of the kidney using the *Quick Start Guide* and *Model*.

Step 2: After using the *Quick Start Guide* to get an understanding of the parts of the kidney, hand out the *Worksheet* for students to complete.

Step 3: See the *Answer Key* to correct the *Worksheet*.

Key Terms and Definitions:

Discuss and demonstrate the location and function of these parts on the *Pig Kidney Model*:

Medulla: innermost part of the kidney

Renal vein: vein that carries blood to each kidney

Renal artery: artery that carries blood away from the kidneys

Ureter: carries urine to the bladder

Cortex: where ultrafiltration occurs

Renal column: extension of the renal cortex, giving anchor to the cortex

Pyramid: cone-shaped tissues of the kidney that transport urine from the outer part of the kidney to where it passes through the ureter

Papillae: located at the apex of the pyramids, they open and drain into the renal pelvis

Renal pelvis: act as a funnel for urine flowing to the ureter

Name: _____ Class: _____

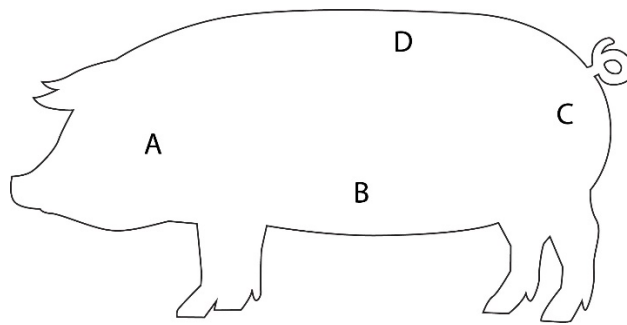
Pig Kidney Worksheet

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Activity:

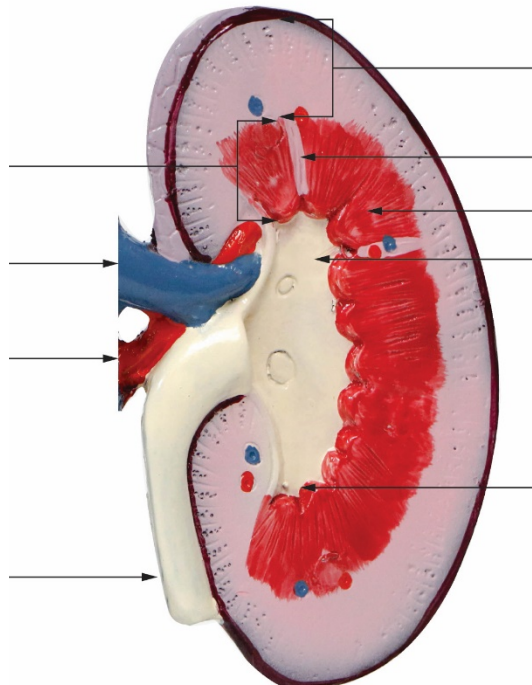
Locate where the left kidney should be on this pig and circle the letter closest to that spot.



Activity:

Write the correct term with the correct location on the kidney:

1. Medulla
2. Renal vein
3. Renal artery
4. Cortex
5. Ureter
6. Pyramid
7. Renal column
8. Papillae
9. Renal pelvis



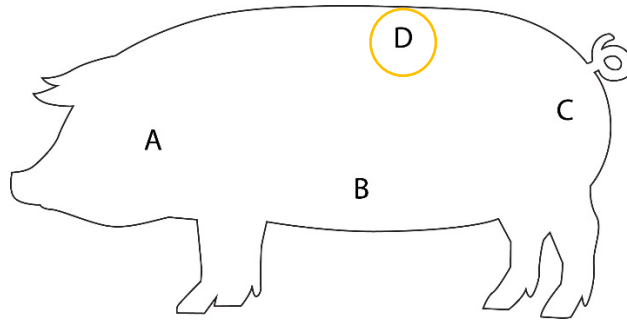
Pig Kidney Worksheet Answer Sheet

Introduction:

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Activity:

Locate where the left kidney should be on this pig and circle the letter closest to that spot.



Activity:

Write the correct term with the correct location on the kidney:

1. Medulla
2. Renal vein
3. Renal artery
4. Cortex
5. Ureter
6. Pyramid
7. Renal column
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