

ULTRASONOGRAPHY

Discover how it works

Directions

Measure the distance from the red line to the image along the black grid. Make a mirror image of the image in the empty boxes using only dots on the horizontal lines of the grid. Connect the dots using straight lines.

Notice as you make more dots the image becomes clearer. An ultrasound uses a similar strategy. The number of “pings,” or bursts of high frequency sound, the transducer sends out determines how clear the image will be.

The distance from the red line to the image is how far away the object is. They create the mirror image by measuring the amount of time that it takes the “ping” to echo back from the object.



MORGRIDGE
INSTITUTE FOR RESEARCH

OUTREACH EXPERIENCES

ANSWER KEY

ULTRASONOGRAPHY

Discover how it works

Directions

Measure the distance from the red line to the image along the black grid. Make a mirror image of the image in the empty boxes using only dots on the horizontal lines of the grid. Connect the dots using straight lines.

Notice as you make more dots the image becomes clearer. An ultrasound uses a similar strategy. The number of "pings," or bursts of high frequency sound, the transducer sends out determines how clear the image will be.

The distance from the red line to the image is how far away the object is. They create the mirror image by measuring the amount of time that it takes the "ping" to echo back from the object.

