

Names _____

A

| Unit | Actual depth range | Actual thickness | Model thickness (to scale) | Calculations Approved | Construction Approved |
|------------------|--------------------|------------------|----------------------------|-----------------------|-----------------------|
| Layer 3 (gravel) | 0-500m | | | | |
| Layer 2 (sand) | 500-1000m | | | | |
| Layer 1 (gravel) | 1000-3000m | | | | |

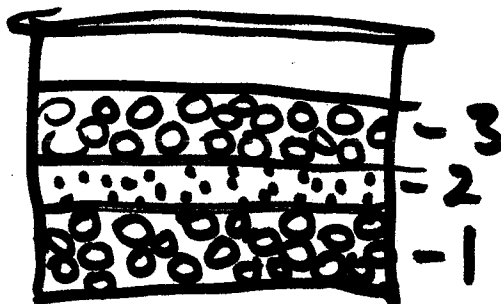
Calculate the thickness of each layer that you will use in your model. Use the scale of 500m = 1cm.

After you have completed the calculations, have either Miss. St. John or Miss Warrior approve your calculations. Then begin the construction of your model.

Tape the ruler on the outside of your container vertically, with 0 cm at the base. Hold the wrapped window screen vertically in the container, and pour the gravel or sand around the outside of it. The wrapped window screen serves to keep out larger particles. You will be pumping water from the "well" lined by the window screen.

Layer 1 is at the bottom. Make it the thickness that you calculated. Repeat for layers 2 and 3.

side view



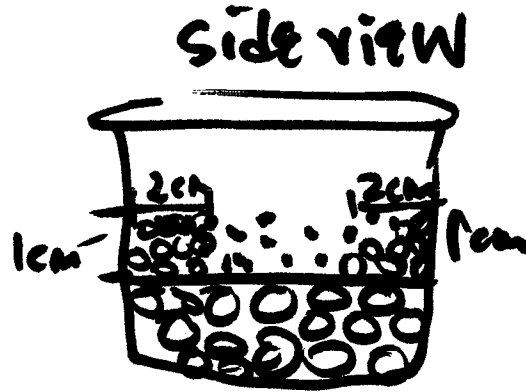
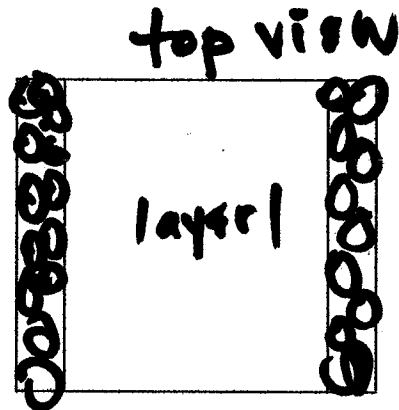
| Unit | Actual depth range | Actual thickness | Model thickness (to scale) | Calculations Approved | Construction Approved |
|------------------|--------------------|------------------|----------------------------|-----------------------|-----------------------|
| Layer 3 (clay) | 0-200m | | | | |
| Layer 2 (sand) | 200-500m | | | | |
| Layer 1 (gravel) | 500-3000m | | | | |

Calculate the thickness of each layer that you will use in your model. Use the scale of $1000\text{m} = 2\text{cm}$.

After you have completed the calculations, have either Miss. St. John or Miss Warrior approve your calculations. Then begin the construction of your model.

Tape the ruler on the outside of your container vertically, with 0 cm at the base. Hold the wrapped window screen vertically in the container, and pour the gravel or sand around the outside of it. The wrapped window screen serves to keep out larger particles. You will be pumping water from the "well" lined by the window screen.

Layer 1 is at the bottom. Make it the thickness that you calculated. Line 2 opposite edges of the container with gravel 1 cm. tall, and extending ~2 cm. inward. The gravel along the edges not only represents the configuration of the actual aquifer system (alluvial fan deposits), but will allow you to read the water level easier. Fill in layers 2 and 3, using the calculated thickness.



Names _____

C

| Unit | Actual depth range | Actual thickness | Model thickness (to scale) | Calculations Approved | Construction Approved |
|------------------|--------------------|------------------|----------------------------|-----------------------|-----------------------|
| Layer 3 (clay) | 0-500m | | | | |
| Layer 2 (sand) | 500-1000m | | | | |
| Layer 1 (gravel) | 1000-3000m | | | | |

Calculate the thickness of each layer that you will use in your model. Use the scale of 500m = 1cm.

After you have completed the calculations, have either Miss. St. John or Miss Warrior approve your calculations. Then begin the construction of your model.

Tape the ruler on the outside of your container vertically, with 0 cm at the base. Hold the wrapped window screen vertically in the container, and pour the gravel or sand around the outside of it. The wrapped window screen serves to filter out larger particles. You will be pumping water from the "well" lined by the window screen.

Layer 1 is at the bottom. Make it the thickness that you calculated. Line 2 opposite edges of the container with gravel 2 cm. tall, and extending ~2-3 cm. inward. The gravel along the edges not only represents the configuration of the actual aquifer system (alluvial fan deposits), but will allow you to read the water level easier. Fill in layers 2 and 3, using the calculated thickness.

