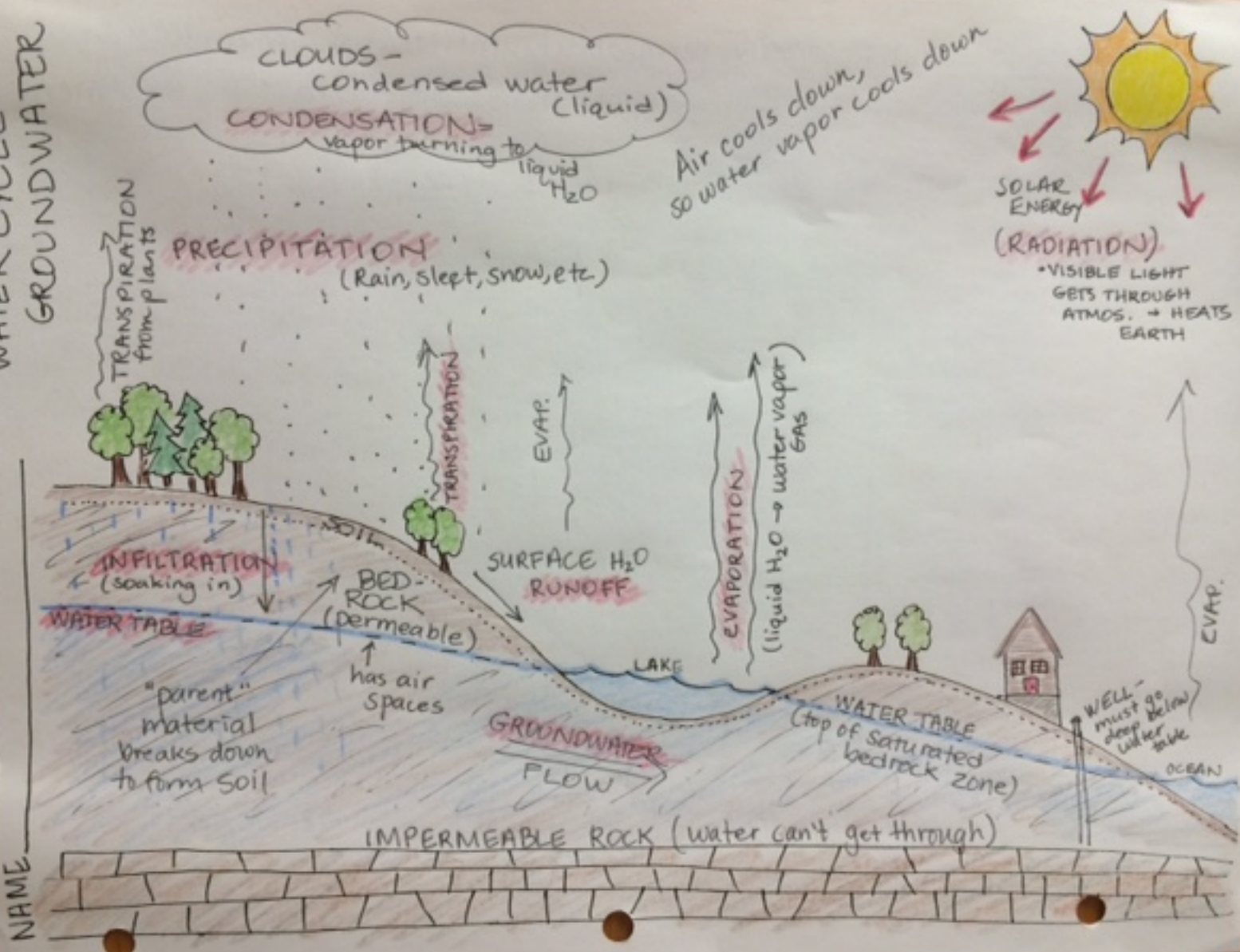


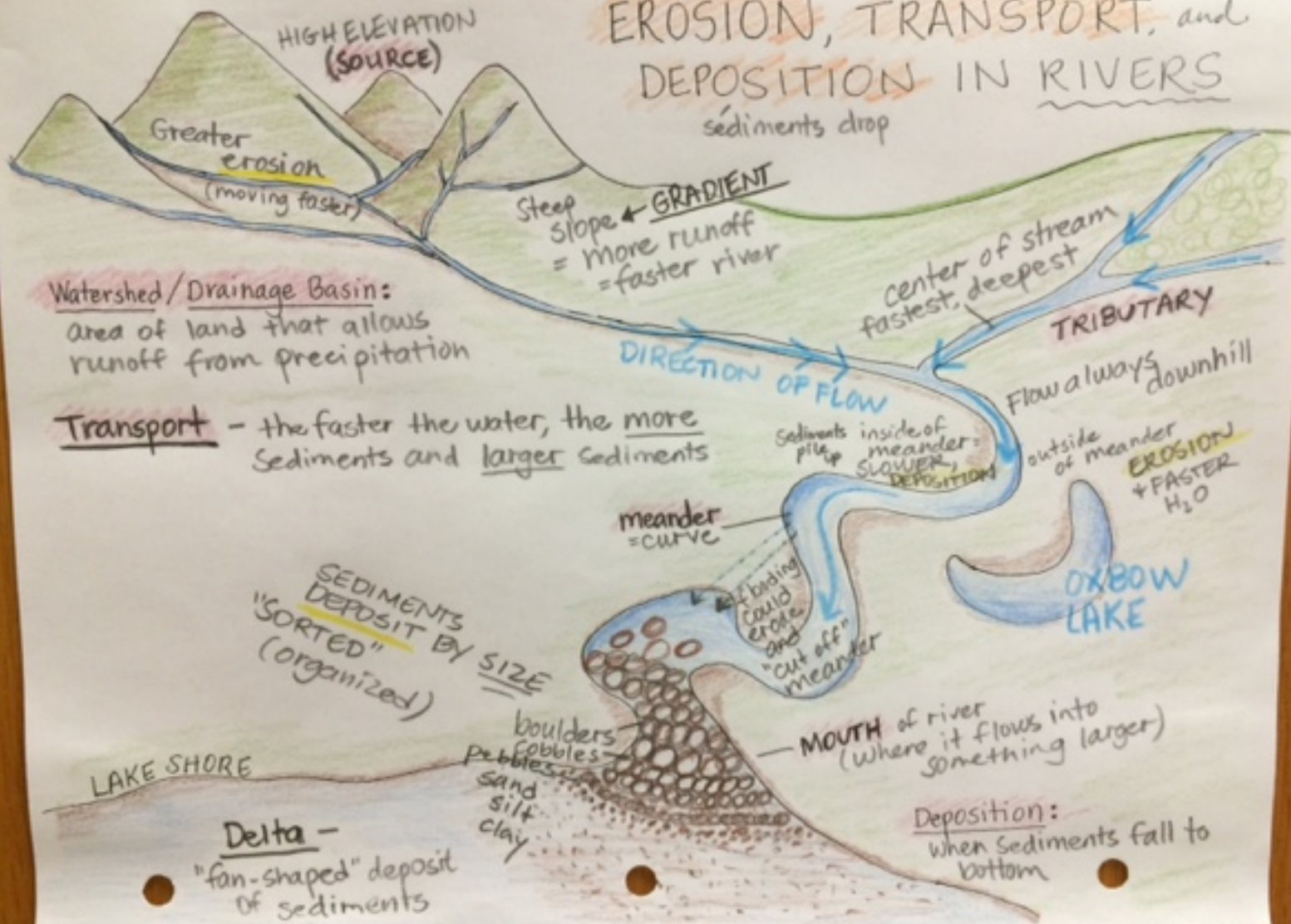
WATER CYCLE & GROUNDWATER



NAME _____

EROSION, TRANSPORT, and DEPOSITION IN RIVERS

- wearing away
- moving sediments
sediments drop



Watershed/Drainage Basin:
Area of land that allows runoff from precipitation

Transport - the faster the water, the more sediments and larger sediments

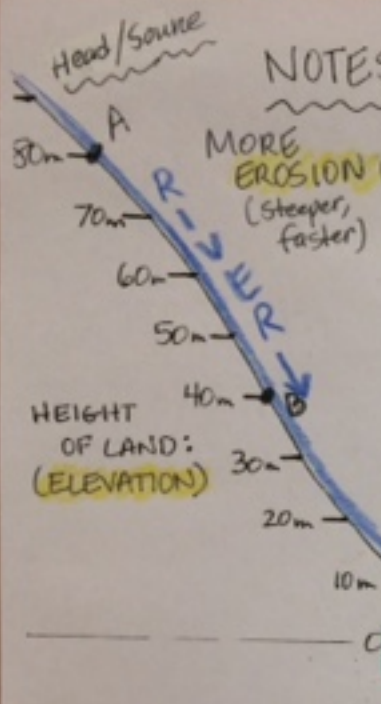
SEDIMENTS DEPOSIT BY SIZE
"SORTED" (organized)

Delta -
"fan-shaped" deposit of sediments

Deposition:
when sediments fall to bottom

Name Mrs. Fink
Date _____

NOTES: DEPOSITION OF SEDIMENTS



MORE EROSION UPSTREAM
(steeper, faster)

Gradient measurements:
(slope) higher gradient = steeper

$A \rightarrow B = 40m / 48m = .83 m/m$
 $B \rightarrow C = 40m / 60m = .67 m/m$
 $C \rightarrow D = 20m / 47m = .43 m/m$
 $D \rightarrow E = 10m / 150m = .07 m/m$

$$\text{Gradient} = \frac{\text{change in field value}}{\text{distance}}$$
 (often elevation)

*** Round to nearest hundredth ***
STEEPEST SLOPE
(river moves faster + erodes more)

SHALLOW SLOPE
(river slows down + deposits more)

velocity (speed) slows down
*** MORE DEPOSITION** - Sediments drop off

Scale: 1 cm = 10 m

Type of sediment:
Size of sediment:
Rock formed:

<u>Boulders</u> larger than 25.6 cm	<u>Cobbles</u> 6.4 to 25.6 cm	<u>Pebbles</u> 0.2 to 6.4 cm	<u>Sand</u> 0.006 to 0.2 cm	<u>Silt</u> 0.0004 to 0.006 cm	<u>Clay</u> less than 0.0004 cm	calcite halite (salts) minerals
CONGLOMERATE (from rounded particles)			SANDSTONE	SILTSTONE	SHALE	ROCK SALT
						LIMESTONE

