3D-RST is supported by the NSF under grant number #DRL-2101383

Base Layer Section: Soil Technician: _____

What material do you predict will **function** the best? _____

Material:	Durability against water: How well does the road hold up after experiencing a flood?					Workability: How easy is the material to use and manipulate?					Rank from best to worst:
Dirt	1	2	3	4	5	1	2	3	4	5	
Sand	1	2	3	4	5	1	2	3	4	5	
Clay	1	2	3	4	5	1	2	3	4	5	
Rock	1	2	3	4	5	1	2	3	4	5	

After completing the lab, explain how to improve a poor-quality base material.

Base Layer Section: Soil Technician: _____

What material do you predict will **function** the best? _____

Material:	Durability against water: How well does the road hold up after experiencing a flood?					Workability: How easy is the material to use and manipulate?					Rank from best to worst:
Dirt	1	2	3	4	5	1	2	3	4	5	
Sand	1	2	3	4	5	1	2	3	4	5	
Clay	1	2	3	4	5	1	2	3	4	5	
Rock	1	2	3	4	5	1	2	3	4	5	

After completing the lab, explain how to improve a poor-quality base material.

3D-RST is supported by the NSF under grant number #DRL-2101383

Road Materials: Pavement Engineer: _____

What material do you predict will **function** the best? _____

Material:	Give a score on how well it held up its shape: (1-poor, 5-good)	Drivability: (1-rough, 5-smooth)	Rank from best to worst:
Dirt	1 2 3 4 5	1 2 3 4 5	
Asphalt	1 2 3 4 5	1 2 3 4 5	
Concrete	1 2 3 4 5	1 2 3 4 5	
Gravel	1 2 3 4 5	1 2 3 4 5	

What upkeep and maintenance would be required for these roads to maintain their long-term **structure and function**?

Dirt –

Gravel –

Asphalt –

Concrete –

Road Materials: Pavement Engineer: _____

What material do you predict will **function** the best? _____

Material:	Give a score on how well it held up its shape: (1-poor, 5-good)	Drivability: (1-rough, 5-smooth)	Rank from best to worst:
Dirt	1 2 3 4 5	1 2 3 4 5	
Asphalt	1 2 3 4 5	1 2 3 4 5	
Concrete	1 2 3 4 5	1 2 3 4 5	
Gravel	1 2 3 4 5	1 2 3 4 5	

What upkeep and maintenance would be required for these roads to maintain their long-term **structure and function**?

Dirt –

Gravel –

Asphalt –

Concrete –

3D-RST is supported by the NSF under grant number #DRL-2101383

Drainage: Hydrology Engineer: _____

What **structure** do you think will work best? _____

Structure:	Describe the damage or change. Determine if it was a pass or fail.	Rank from least to most effective:
Dirt		
Culverts		
Surrounding Landscape		
Absorbent		

What other methods could be tested here? Explain how those methods would divert the water away from the road.

Drainage: Hydrology Engineer: _____

What **structure** do you think will work best? _____

Structure:	Describe the damage or change. Determine if it was a pass or fail.	Rank from least to most effective:
Dirt		
Culverts		
Surrounding Landscape		
Absorbent		

What other methods could be tested here? Explain how those methods would divert the water away from the road.