

Name \_

## Dirt Roads - Student Worksheet

### Activity: Dirt Road Rules

#### Materials per group

- Access to sandpit
- Watering can or bottle of water with holes in base to create a sprinkler.

### Method

- 1. Use your hands to scoop out a level stretch of road into the surface of the sandpit.
- 2. "Rain" about 200mL of water over the surface of the excavated road.
- 3. Observe and either photograph the effect of rain on the surface or describe it in words in the table provided.
- 4. Make a raised flat road of compacted sand. And observe the effects of rain.
- 5. Repeat, but make the road surface slightly domed to shed water from the center of the road. Compact the sand well.

Which design is most efficient in shedding water from the road surface?

Road design	Observations
1. Road cut into surface	



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2. Flat raised road	
3. Domed raised road	

Suggest improvements in this design.

Why are dirt roads often closed after heavy rain?



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Why is the level of the road above the level of the adjoining countryside?

Why has gravel been added to the road surface?

Why are there wreaths of wildflowers growing alongside the road in the gutters?



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