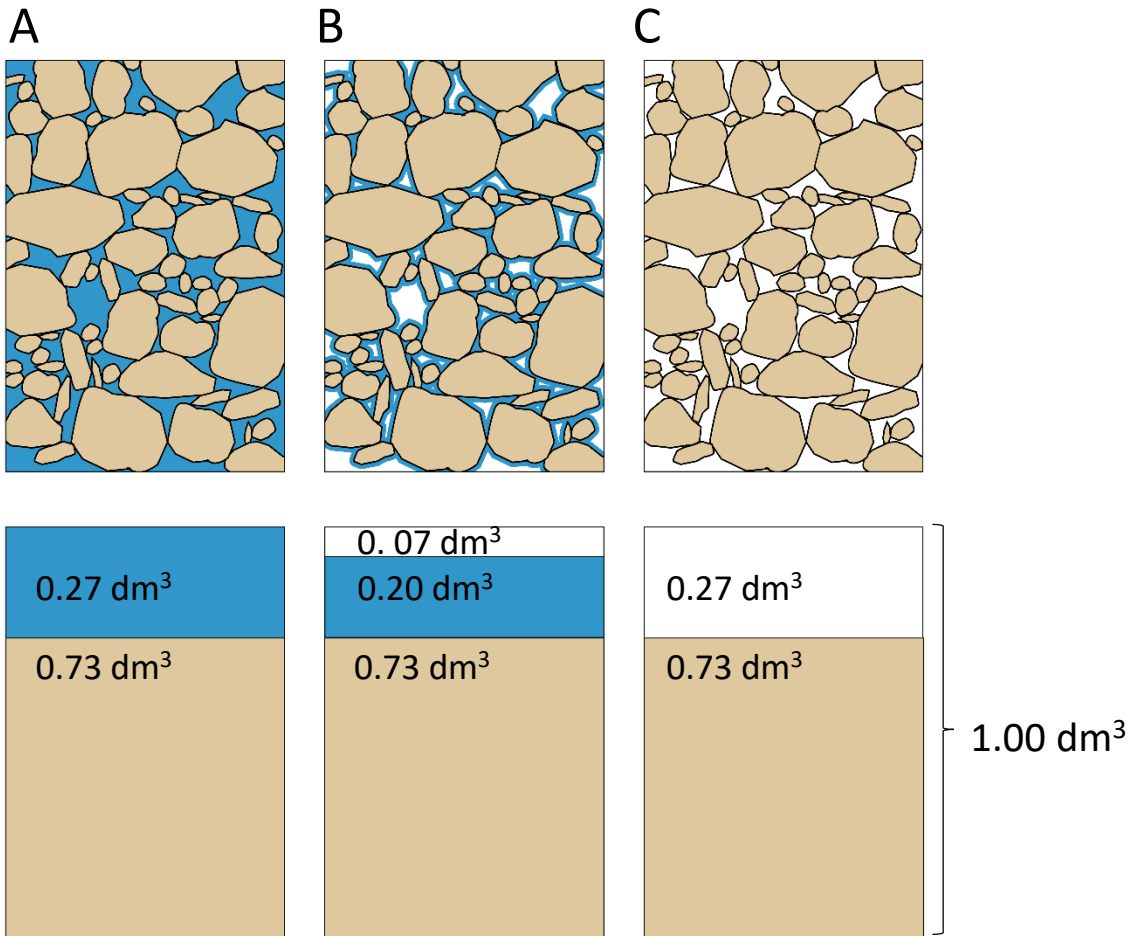


Calculate the missing volumes and add them to the empty boxes

	A, water saturated	B	C, dry
Gas $V_g$			
Liquid (water) $V_l$		$0.20 \text{ dm}^3$	
Soilds $V_s$	$0.73 \text{ dm}^3$	$0.73 \text{ dm}^3$	$0.73 \text{ dm}^3$
Total volume, $V_T$	$1.00 \text{ dm}^3$	$1.00 \text{ dm}^3$	$1.00 \text{ dm}^3$
Pore volume, $V_v$			
Porosity			

- Total volume,  $V_T = V_s + V_l + V_g$
- Volume solid particles ( $V_s$ )
- Volume liquid ( $V_l$ )
- Volume air ( $V_g$ )
- Pore volume,  $V_v = V_l + V_g$
- Porosity,  $n = (V_l + V_g) / V_T$

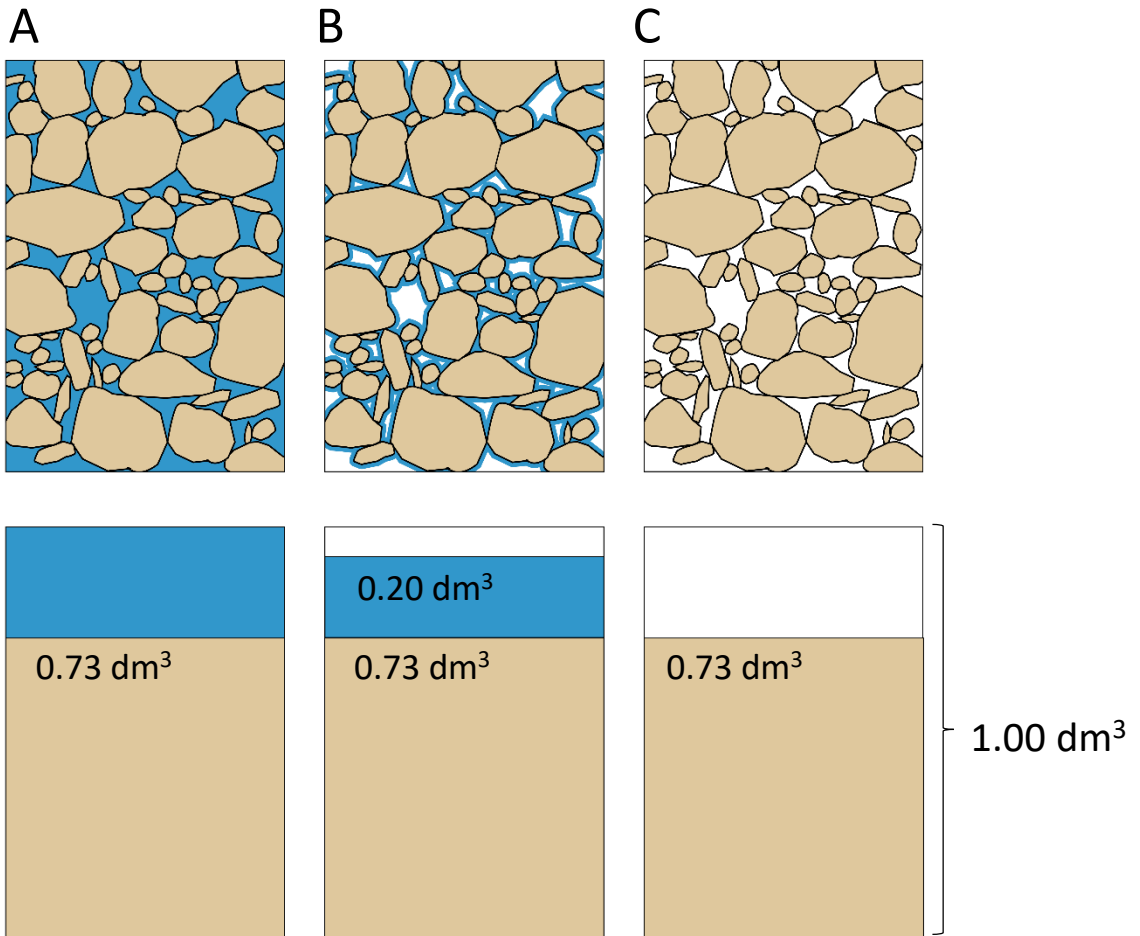


**Calculate the weights and add them to the empty boxes**

	A, water saturated	B	C, dry
Gas (air) $W_g$			
Liquid (water) $W_l$			
Soilds (quartz) $W_s$			
Total weight, $W_T$			

Weight ( $W$ , kg) = Denisty ( $\rho$ , kg/dm³) \* Volume ( $V$ , dm³)

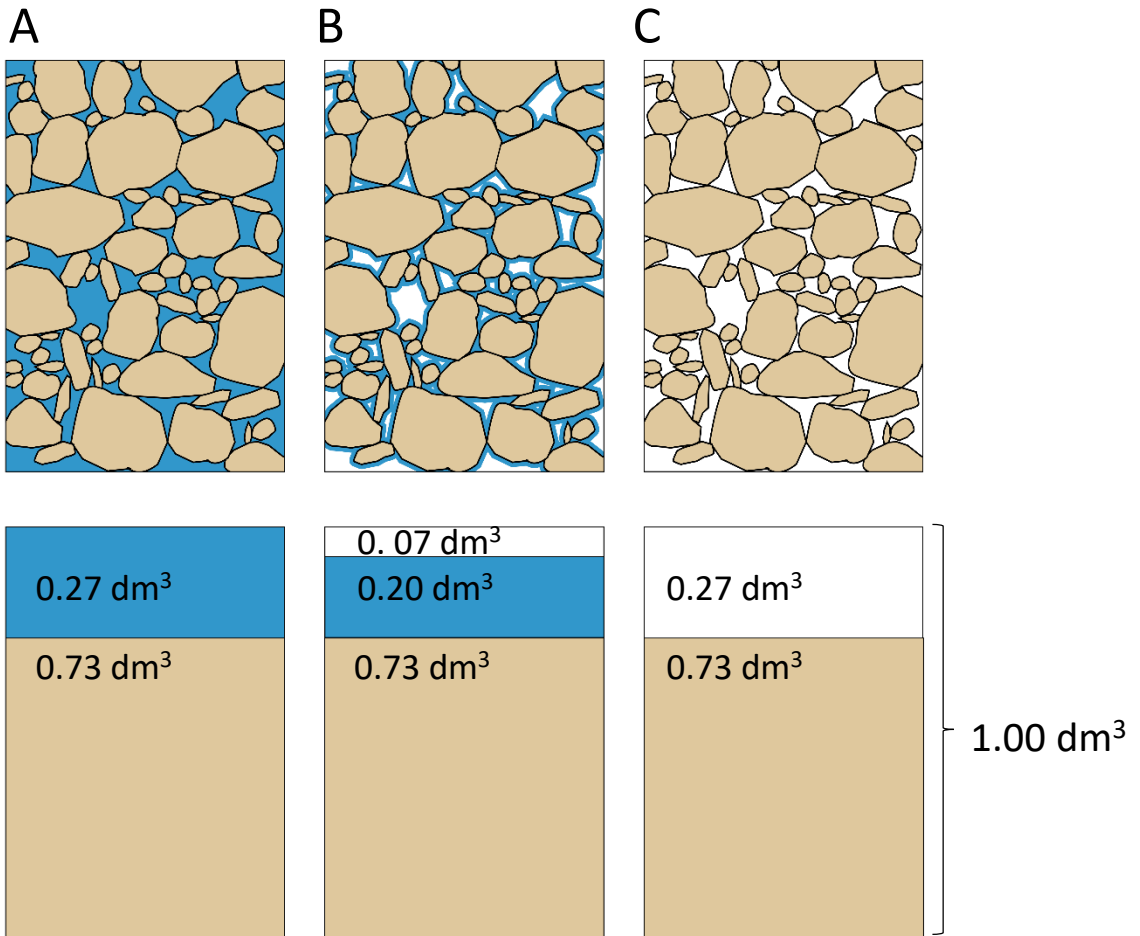
- Density of quartz: 2.65 kg/dm³
- Density of water: 1.00 kg/dm³
- Density of air: 0.001 kg/dm³  $\approx$  0 kg/dm³



Calculate the missing volumes and add them to the empty boxes

	A, water saturated	B	C, dry
Gas $V_g$	0 dm <sup>3</sup>	0.07 dm <sup>3</sup>	0 dm <sup>3</sup>
Liquid (water) $V_l$	0.27 dm <sup>3</sup>	0.20 dm <sup>3</sup>	0.27 dm <sup>3</sup>
Soilds $V_s$	0.73 dm <sup>3</sup>	0.73 dm <sup>3</sup>	0.73 dm <sup>3</sup>
Total volume, $V_T$	1.00 dm <sup>3</sup>	1.00 dm <sup>3</sup>	1.00 dm <sup>3</sup>
Pore volume, $V_v$	0.27 dm <sup>3</sup>	0.27 dm <sup>3</sup>	0.27 dm <sup>3</sup>
Porosity	0.27	0.27	0.27

- Total volume,  $V_T = V_s + V_l + V_g$
- Volume solid particles ( $V_s$ )
- Volume liquid ( $V_l$ )
- Volume air ( $V_g$ )
- Pore volume,  $V_v = V_l + V_g$
- Porosity,  $n = (V_l + V_g) / V_T$



**Calculate the weights and add them to the empty boxes**

	A, water saturated	B	C, dry
Gas (air) $W_g$	0 kg	0 kg	0 kg
Liquid (water) $W_l$	0.27 kg	0.20 kg	0 kg
Soilds (quartz) $W_s$	1.93 kg	1.93 kg	1.93 kg
Total weight, $W_T$	2.20 kg	2.13 kg	1.93 kg

Weight ( $W$ , kg) = Denisty ( $\rho$ , kg/dm<sup>3</sup>) \* Volume ( $V$ , dm<sup>3</sup>)

- Density of quartz: 2.65 kg/dm<sup>3</sup>
- Density of water: 1.00 kg/dm<sup>3</sup>
- Density of air: 0.001 kg/dm<sup>3</sup>  $\approx$  0 kg/dm<sup>3</sup>