Heat

Questions

1.) When you shake it, internal energy goes up, and it gets slightly warmer. Work done goes to energy.

2.) "Temperature" doesn't flow, heat flows.
No, it depends on the amount and specific heat of the two objects.

3.) Not always, flows from high temp to lower temp.
It is possible for object with lower temp to have more internal energy if it has more mass.

4.) More water means more heat needs to be pulled out of the water to turn it to ice, Less likely for the water in the plant to freeze.

5.) Water has more heat to give off when it is warmed.

6.) Evaporation is a cooling process. Heat from the canteen is used to change the phase of water

7.) When steam cools quickly it condenses to water releasing LOTS of heat into your skin.

8.) Evaporation is a cooling process (just like #6)

9.) Not really, water is still at 100°C no matter how fast it boils, boiling faster just means that more water is changing phase each second.

10.) Not ~~eff~~ at all! Just moves the air. Moving air helps speed up evaporation to cool you down.

13.) A little water on your feet can help speed up evaporation on your feet. Also, water conducts heat out of your feet faster than dry sand.

14.) Your heat ~~heats~~ warms the air around you, so if you can keep that warm air near you and not moving away, you will lose less heat as you no longer need to continue to warm the air