A water well is an excavation or structure created in the ground by digging, boring or drilling to access water in underground aquifers. The well water is drawn via an electrical pump or a mechanical pump (e.g. from a water-pumping windmill). It can also be drawn up using containers, such as buckets that are raised mechanically or by hand.

A well is made by reaching groundwater in the water table. Groundwater is stored naturally below the earth’s surface. Most groundwater originates as rain seeps into the ground and collects.

Top Tips: Here are some things that you can do so you don’t waste water:

1. Take quicker showers. Did you know that a 10 minute shower uses 120 litres of water? How about you try and take three-minute showers and save 84 litres of water every time you take a shower.

2. Better still take three-minute showers and keep a bucket with you in the shower and any water that gets in your bucket can be used in the garden.
The Gnangara groundwater system north of Perth provides us with 60 per cent of water which is treated for human consumption. A lot of water is also used for agriculture, forests, public parks and gardens and industry and household gardens irrigated with bores. Groundwater also sustains our unique wetlands, which in turn supports native vegetation and animals.

**Top Tips**

3. Use a glass of water while brushing your teeth. There is no need to leave the tap running while you brush. Simply wet your toothbrush before you begin and use a glass of water to rinse your mouth.

4. Don’t water your garden during the day. There is a ban on watering with sprinklers between 9am and 6pm. As plants don’t absorb water during darkness the best time to water is early in the morning.

5. If you see any leaking taps in your house, ask your dad or mum to fix them.
Water well

crossword...

Across
2. What is reducing our rainfall?
6. Apart from drinking water the Gnangara groundwater is also used for this farming activity.
9. Which aquifer is our drinking water normally extracted from?
11. What is the name of the area where groundwater is stored?
13. Name a type of Gnangara groundwater aquifer.
14. A source of drinking water other than groundwater.
16. What is the most common species of a native tree found on the Gnangara groundwater system?
17. What is another name for water wells?
19. This industry uses up a lot of our groundwater.
20. What needs to happen so that groundwater is replenished?

Down
1. A machine powered by the energy of the wind that can be used to pump groundwater to the surface.
3. What is the largest source of groundwater in Perth called?
4. When is the best time to water your gardens?
5. These natural water pools rely on groundwater to keep them filled.
7. On what surface should you use to wash your car?
8. What could you use in the shower to save water?
10. What should you use to clean driveways and paved areas?
12. What household appliance is very thirsty?
15. This is the per cent amount of water that comes from the Gnangara groundwater system for human consumption.
18. You could save water if you only took three minute what?

Top Tips
6. Dishwashers can be thirsty. Turn on your dishwasher only when it’s full. This way you can save on electricity as well as water.

7. When you need to clean down driveways or paved areas use a broom. Using a hose is a fast way to waste water.

9. If you have a dual flushing toilet use the flushing choices correctly, so you use less water whenever possible.

Most rainwater is absorbed by the ground and fills the tiny spaces between soil particles. However, excess water—called runoff—runs over the top of the soil until it reaches a river, stream or dam.

As water seeps into the ground, it settles in the pores and cracks of underground rocks and into the spaces between the grains of sand and pieces of gravel. In time, the water trickles down into a layer of rock that is watertight known as an aquifer.

Clues to crossword can be found throughout this Activity Sheet!
The level of water in the aquifer has been slowly lowering due to less rainfall because of climate change. Lots of wetlands don’t have water in them any more and some trees are dying because their root system can’t find water close enough to the ground. That means more and more native animals don’t have enough water to drink and places to hide and feed.

Our farmers are also struggling to get enough to water their fruit and vegetables.

That’s why it’s important not to waste our precious water.

Find the words below in the blackboard and draw around the letters that form the word. The letters that form the words can be found up, down and diagonally... how many can you find?

TOP TIP Number 10. Remember plants in pots use more water than if they were in the ground.