

Week 3 – Bioremediation – Key

2. Place the examples of biotechnology into the right column.

Do you know any other examples?

Food	Medicines	Eco-friendly products	Genetics	Biological Weapons
making cheese/yogurt	antibiotics	biodegradable plastics	genetically modified plants	anthrax ricin
making wine/beer	vaccines	biofuels	cloning	

3.

1)	c)
2)	b)
3)	a)
4)	a)
5)	c)
6)	c)
7)	a)
8)	c)
9)	d)
10)	d)

4. b)

5.

They're very good organisms. These organisms help **clean up** a lot of the contaminated areas, or **contaminated** sites that we would have around in our environment and they do so by just carrying out their daily activities. So they're **breathing** and eating various chemicals that are in the **environment** and they survive that way and at the same time they help us by **removing** things that we don't want to have there.

We have recently **isolated** an organism that we refer to as BAV 1, and that stands for Bachman vinylchloride 1. Bachman is the road site where we found it and it degrades this chemical vinylchloride that contains one chlorine on it and it's a **carcinogen** and a chemical we don't want accumulating in our groundwater supplies at all. And BAV 1 is a member of a group of organisms called Dehalococcoides, and that's basically, „dehalo-“, means removing a **halogen**, like chlorine, and „coccoide“ means **round** shaped. This is Dehalococcoides isolate BAV1. It's very small, it's smaller than one micron in **diameter**, and it lives in our groundwaters – in almost any groundwater area. It does not grow using **oxygen** - in fact, if we put it out in our room, it would die. It has to breathe these chlorinated **chemicals**.

6.

1) discover	a) a strain of bacteria
2) clean up	b) a pollutant
3) publish	c) a scientific paper
4) leech	d) into groundwater
5) contaminate	e) supplies of drinking water
6) release	f) into the atmosphere
7) conduct	g) physiological studies