S2	Name:



Breeding Chickens

Eggs should be collected a few times each day to ensure they have the best chance possible of hatching. They should be laid in a relatively clean nesting box and be free of chicken poo. It is a good idea to place eggs in a carton, pointy end down, as you collect them. An egg carton is one way of reducing the chance of breaking eggs. Your hands should be clean when collecting eggs. If your hands are dirty or if the eggs end up with chicken poo on them, there is an increased chance of them being affected by bacteria, resulting in less chicks hatching or chicks dieing during their first week.

Eggs should be stored in a cool place where their temperature can remain constant at between $12^{\circ c}$ and $15^{\circ c}$ ($50^{\circ}F - 60^{\circ}F$) if possible. They should be stored well away from direct sunlight. One location that might be suitable is the pantry.

Most poultry books recommend you do not keep eggs more than 7 days before beginning incubation. You can keep them for 14 days and still get a reasonable hatch, provided the eggs have been well stored. Naturally, the sooner you put them in the incubator, the more eggs you are likely to hatch.

Turning your eggs during storage is also a recommended practise. If you store your eggs on their side, turn them one direction today, then the other tomorrow. Continue repeating this process until you incubate the eggs. If you store them in an egg carton, put it on a 45° lean and alternate this each day. Remember to store your eggs with the pointy end down. Correct storage and turning of the eggs helps to reduce the likelihood of the embryo (developing chick) touching and sticking to the shell membrane (inside of the shell). If the developing chick sticks to the shell membrane it will often die during development or during the hatch as it won't be able to rotate and get free from the shell.

Never wash eggs in cold water. The egg will draw the moisture in along with any bacteria on the soiled shell.

If you washed an egg, you have probably removed some of the `bloom'. You may need to replace this with a special oil otherwise the egg is more likely to lose excess moisture during incubation, resulting in a dead chick.

It is also advisable to carefully inspect your eggs before incubating them. The following eggs should not be incubated:

- If they have any hairline cracks
- If they have chalky shells
- If they are a rather odd shape such as very long or really fat
- If they are too small or too large for the breed

These eggs have a low hatching rate. Some will hatch, but you are just wasting your time by putting them in the incubator.

There are two main types of incubators; still air incubators and forced draught incubators. Both incubators are capable of giving good results. Much depends on your care during egg collecting, how well you stored the eggs and how well you select the eggs to be incubated. If you fail to do any of these well, it will result in a much lower percentage of hatched chicks than you probably hope for.

Be aware that the temperature you set a still air incubator at is somewhat higher than a forced draught incubator. In a still air incubator, you will most likely have to set it at around 103°F. It will need to be this temperature at the top of the eggs. A forced draught incubator will need to be set at approximately 99.5°F.

It is important to turn your eggs each day at least twice, otherwise you will be lucky to hatch 50% of your eggs. You do not need to turn them during the last three days. Auto turn incubators save a lot of work.

If you are hatching less than 60% of your eggs, follow the information above. In addition to this, you might like to download a file called "What went wrong!" which explains where problems might be occurring.



Breeding Chickens

1. How often should eggs be collected?	
2. What is one suggested way of collecting eggs?	
3. What might cause bacteria to enter an egg?	
4. How can you solve this problem?	
5. Name one location where you could store your eggs?	

- 6. Which eggs are most likely to hatch? COLOUR the correct answer!
- those incubated within a week of being laid
- those incubated within two weeks of being laid
- those kept for 7 days on the window sill
- those kept for 7 days in the freezer
- 7. Why is it recommended that you turn your eggs each day during storage?
- 8. Washed eggs lose some of their hatchability. Why is this?
- 9. List three types of eggs that are not worth incubating?