

A decorative border surrounds the page, featuring a repeating pattern of small chicks and eggs. Some eggs are cracked open, and some chicks are shown pecking at them. The border is composed of several rows of these illustrations, creating a frame around the central text.

YOLKING AROUND WITH EGGS

Suggestions and Advice for the Teacher:

This package of ideas and activities should be used as a supplement to a unit on "Easter " or "Spring".

The number of eggs you will need for the science experiments will depend on the size of your class, the amount of breakage and on which activities you hope to do with your class. To help keep costs down, get your students to bring in eggs from home.

The simple experiments which give the characteristics of the eggs will be real 'egg'ventures for your children.

Allow small groups of children to go to each centre at a time. Encourage them to explore, question and share discoveries with each other.

The activities were designed to have no pen and paper follow-up assignments so that the time could be spent with handling the eggs. You may wish to develop some or else make a simple evaluation instrument to use with the class after all the centres are completed.

Try to spend as much time as possible with each group at the centre so that they can share their discoveries with you and you can observe their behaviour and comprehension.

All the centres could be set up at the same time and the groups could rotate but it is recommended that only one centre be set up at a time. Some activities lead into other activities and quite often a knowledge of important vocabulary is needed. Set up the centres in this order:

1. EGG SIZE AND SHAPE
2. THE SHELL
3. INSIDE THE EGG
4. IS IT RAW OR HARD-BOILED?
5. FRESH OR ROTTEN?

All groups would go to the centre over the course of a few days and then a class meeting could be held so that everyone could share their experiences. All the centres would be spread out over a course of three weeks and be a part of an integrated unit on Easter or Spring.

Teachers are encouraged to include centres for reading, word study, creative writing, research, art, etc., as well as the 'science' activities in this package.

Large Group Activities:

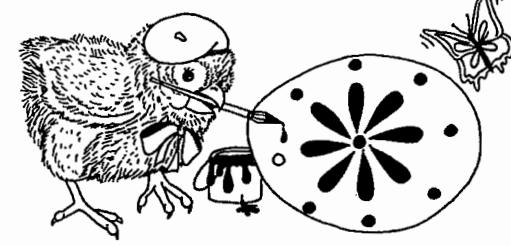
- Cooking with Eggs**
Set up a cooking centre where the students can experiment with egg recipes or organize a breakfast for the class with egg dishes on the menu.
Brainstorm a word list of "ways to cook eggs" and of "egg recipes". This list will be helpful for completing the activity "CRACK THESE EGGS".
- Keep up a chart list of "Egg Vocabulary". After each centre, new vocabulary could be added to the list.
- Make a piñata egg to fill with candy and break it on the last day of your unit. Children also enjoy making their own small piñatas using balloons. They can deflate the balloon and cut the top of the piñata off like a broken egg. Fill it with bunny grass and make a paper bunny or chick head poking out the top. Hang the piñata eggs from the ceiling.
- Seriously consider organizing an Olymp'eggs' with your class. It can be a lot of fun for all, although potentially messy. Think about awarding points for wins and distribute small prizes to the overall point winners and ribbons for participants.
- Another good experience that teaches a lesson on responsibility is to have each child bring an egg to school which will be decorated as a baby. Each child must care for their egg for one full week. The egg should be carried with them at all times. Award special certificates to those egg parents whose baby survived the week. Brainstorm with your class about 'rules' and any 'allowances' (such as permitting eggsitters if they can't possibly bring the egg along).
- Children are never too old to witness the hatching of baby chicks from an incubator. Check into obtaining an incubator and about two dozen fertile eggs. It involves a lot of time and effort (going into school on weekends to turn and check the eggs) but it is a worthwhile experience to share with your class and other classes as well.

For more information and booklets and posters on eggs contact:

(416)-223-5330 The Promotion Department,
The Ontario Egg Producers' Marketing Board,
5799 Yonge St., 10th floor,
Willowdale, Ontario, M2M 3V3.

THE SHELL

COLOUR



Bird eggs come in all colours; solid, spotted or speckled.

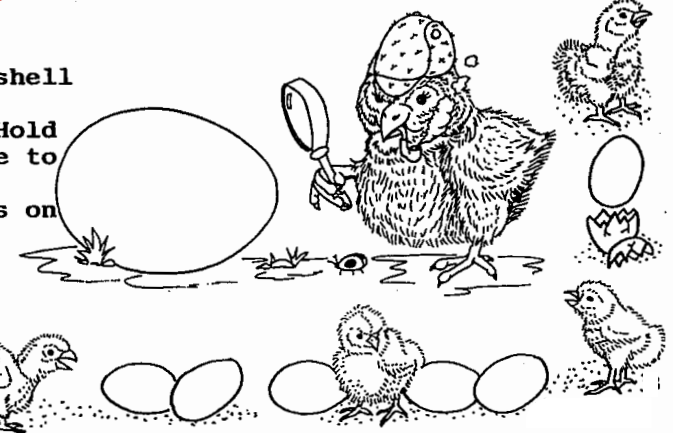
Most chicken eggs are either white or brown. White eggs are laid by leghorn or minorca chickens. Most other chickens lay brown-shelled eggs. There is one type of chicken that lays bluish eggs.

Look very carefully at the colour of each of your eggs. Not all white eggs or brown eggs have exactly the same colour. They often come in different shades.

Place a white egg on a piece of white paper. Do you notice that the egg is not really white? We call its colour "eggshell white". Most people use that shade of white when they paint inside their houses.

PORES

Look at the shell of an egg with a magnifying glass. Hold the magnifier close to your eye while a bright light shines on the egg.



We can show that there's calcium in a shell by using a simple test:

Dip a raw egg in a glass of vinegar. The vinegar is a weak acid that mixes with the calcium and makes carbon dioxide (CO_2). You will see and hear many bubbles of CO_2 coming from the egg.

If we left the egg in the vinegar for a day, what do you think would happen to the shell?

Look at the egg that has been sitting in a jar of vinegar for a day. The shell has become soft and rubbery.

The vinegar has removed most of the calcium from the shell to make CO_2 . The egg now feels like a turtle's egg.

Do you think it will bounce? Maybe later your teacher will let you try it outside.

LABEL THE PARTS OF THE EGG



GERM SPOT - The germ spot is a small white area on the yolk that will develop into a baby chick if a rooster mates with the hen. In fertilized eggs, it is much larger than in the eggs we eat.

YOLK - The yolk serves as food for the developing chick inside the egg. It is made up of many thin layers. These "yolk rings" can be seen when you cut a hard-boiled egg through the middle.

EGG WHITE (Albumen) - The runny, clear part of the egg is called albumen. It is made up of two layers - a thick layer that surrounds the yolk and a thinner layer around the thick layer.

CHALAZAE - On either side of the yolk, there is a twisted strand of albumen called a chalaza. These two strands help to keep the yolk and germ spot in the centre of the egg.

SHELL MEMBRANES - Two thin layers of membranes are attached to the inside of the shell. If a chick grows inside the egg, these become covered with blood vessels to help bring air to the chicks through the pores in the shell.

AIR CELL - This air space, between the two shell membranes, is found at the blunt end of the egg. As an egg gets older, the air cell gets larger.

SHELL - The shell is the protective covering of the egg. With chickens, its colour may range from white to brown to even bluish depending on the breed of chicken.

MAKE A STAND FOR AN EGG

Many items in the home can be used as stands for eggs. Fancy bottle caps, curtain rings, buttons, eggcups and cardboard rings are just a few. With paint, glue and some miscellaneous items, it's easy to decorate and trim the egg stand.

WHAT TO USE TO COLOUR AN EGG

1. CREPE PAPER EGG DYE

Cut several small pieces of crepe paper into a bowl and mix with a cup of warm water. Let it soak for a few minutes until most of the colour is out of the paper. Use this coloured water as egg dye. It's effective but very messy.

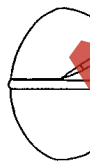
2. COMMERCIAL EGG DYE

The best dye that gives the strongest and richest colour is the commercially bought egg dye (such as that used to make Ukrainian Easter Eggs). Follow the mixing directions carefully. Remember that when dyeing blown eggs it is important to turn the eggs regularly in the dye so that the colour is evenly spread over the egg.

CRAFT IDEAS

Always use a fixative over the finished egg to preserve the work of art. Purchase commercially sold spray or liquid fixative or use colourless nail polish.

1. Use rubber bands to make straight guidelines for drawing pencil lines.
2. Stick masking tape to the egg or lay cut-out patterns over the egg to trace.



SCRATCH-CARVED EGGS

Dye hard-boiled eggs using bright, dark colours. Pencil a design lightly onto the egg. Use a needle or sharp knife point to scratch out the design into the eggshell.

PYSANKY

Create elaborate Pysanky eggs which involves using wax to cover areas of the egg which you do not wish to have dyed. (see the KGR unit, "PYSANKA")

COLLAGE EGGS

Work out a design on the egg and then glue bits of yarn in interesting patterns onto the egg.

Instead you may wish to glue uncooked rice, small seeds or small forms of pasta onto the egg, creating unique designs. Then spray paint the entire egg. Do only one half of the egg at a time so as to allow time for the glue to dry.



CRAYON-ETCHED EGGS

Using dry, hard-boiled eggs, cover the entire surface with a heavy coat of the lightest colour of wax crayon.

Repeat again with one or more colours, layering them on top of one another. For the best results, make the last layer black.

Use a sharp tool to scratch out any design you wish. Cut through all the layers or just cut through one or two layers.

Another idea is to apply the crayon in random splotches of different colours over the egg surface. Build up three or four layers of crayon. Make each one different but keep the last layer black. Scratch out a patchwork design.

OLYMP 'EGGS'

(Ideas for Egg Games)

Your children can have great fun playing egg games. Organize an "Olymp'eggs" for your class. Award points for wins and then have an overall winner, he/she who has accumulated the most points.

Each of the following activities can easily be modified to best suit the needs and skills of your class.

1. EGG ROLLING

Set up a race course outside, on a lawn, or inside in a gymnasium or some place where the eggs can be rolled for some distance.

Have the children race in pairs or small groups. Use hard-boiled eggs.

At the starting line, the children are to begin rolling their egg ahead of them on a signal. They may run or walk.

The child who is able to roll the egg across the finish line without cracking the shell wins the heat. After each roll have the child check the egg for cracks. If there is a crack, the child is disqualified.

Winners from each heat can then roll against other winners.

variation: Use plastic floor hockey sticks to roll the egg towards the finish line but this time try using raw eggs. This is best played outdoors. Be sure each child cleans up any mess that is made. The egg can be easily scooped up with a small shovel and pail.

2. EGG CRACKING

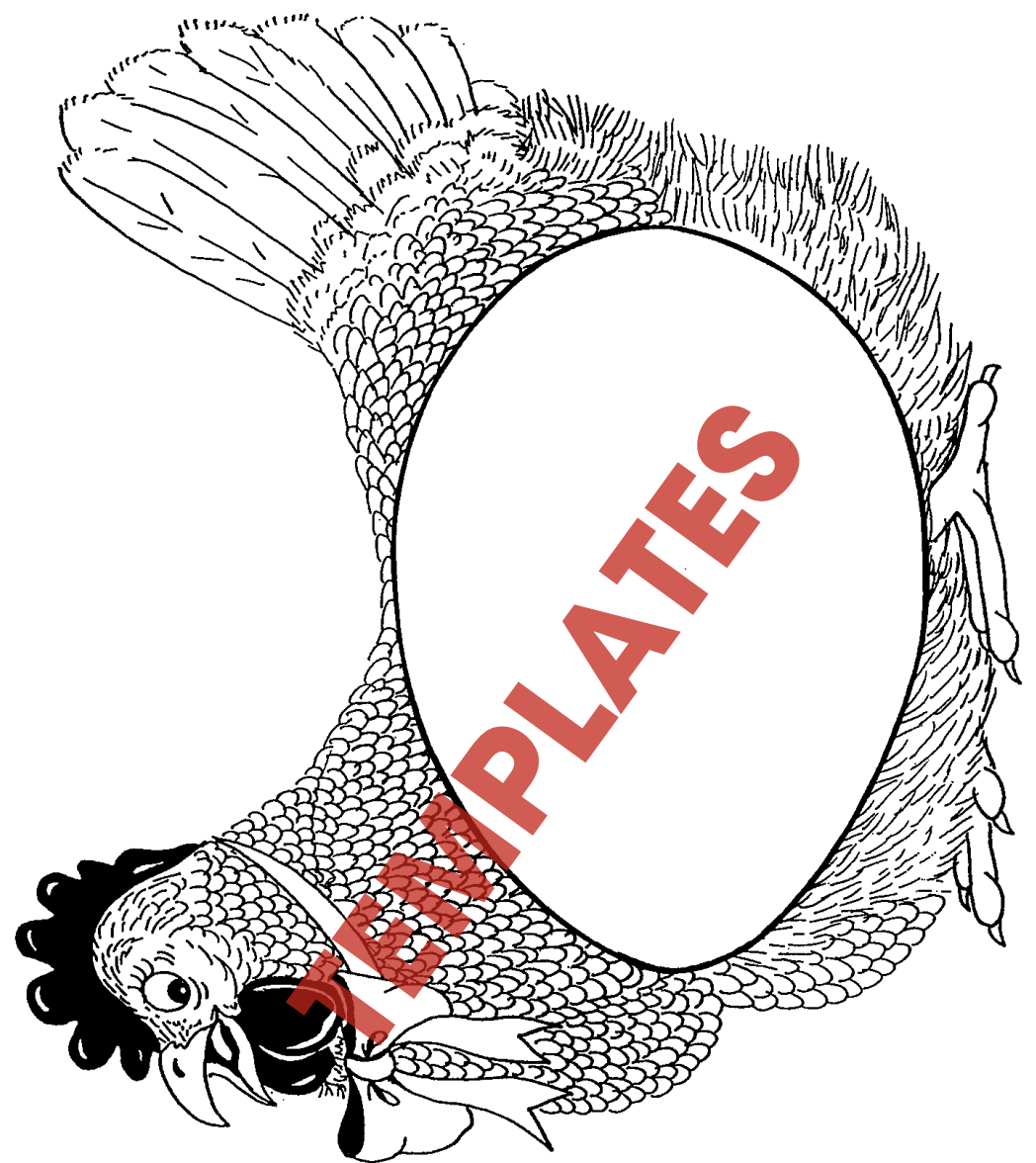
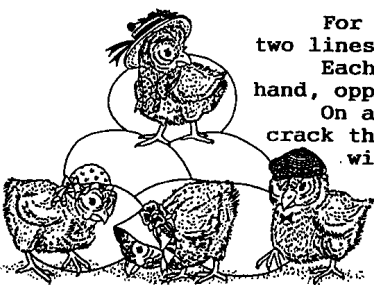
For this game have your class form two lines, facing each other.

Each child stands holding an egg in the hand, opposite a player in the other line.

On a signal, each player attempts to crack the opponent's shell by striking it with his/her egg.

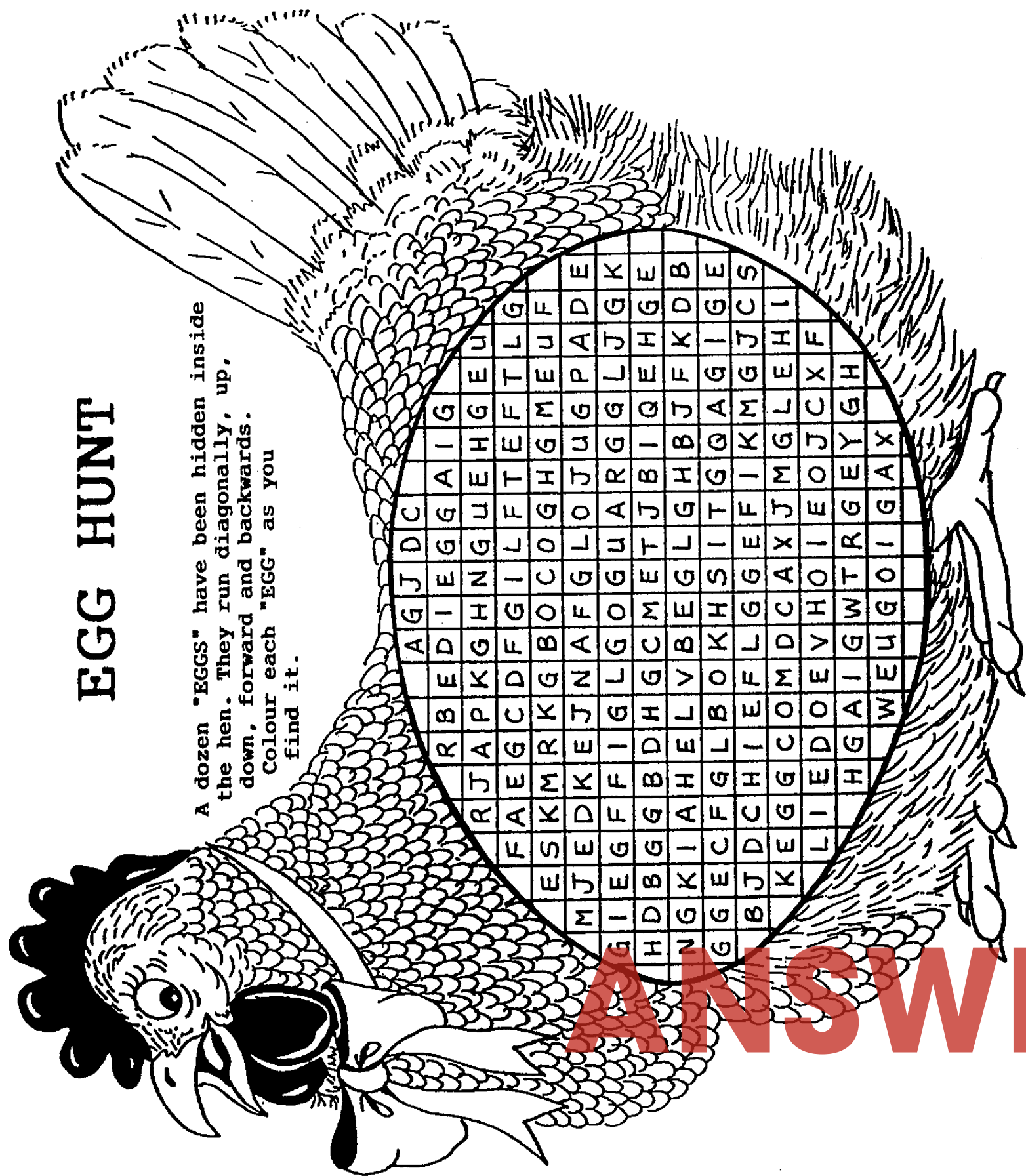
Winners then form two lines and continue the competition until only one player is left with an uncracked egg.

Use hard-boiled eggs.



EGG HUNT

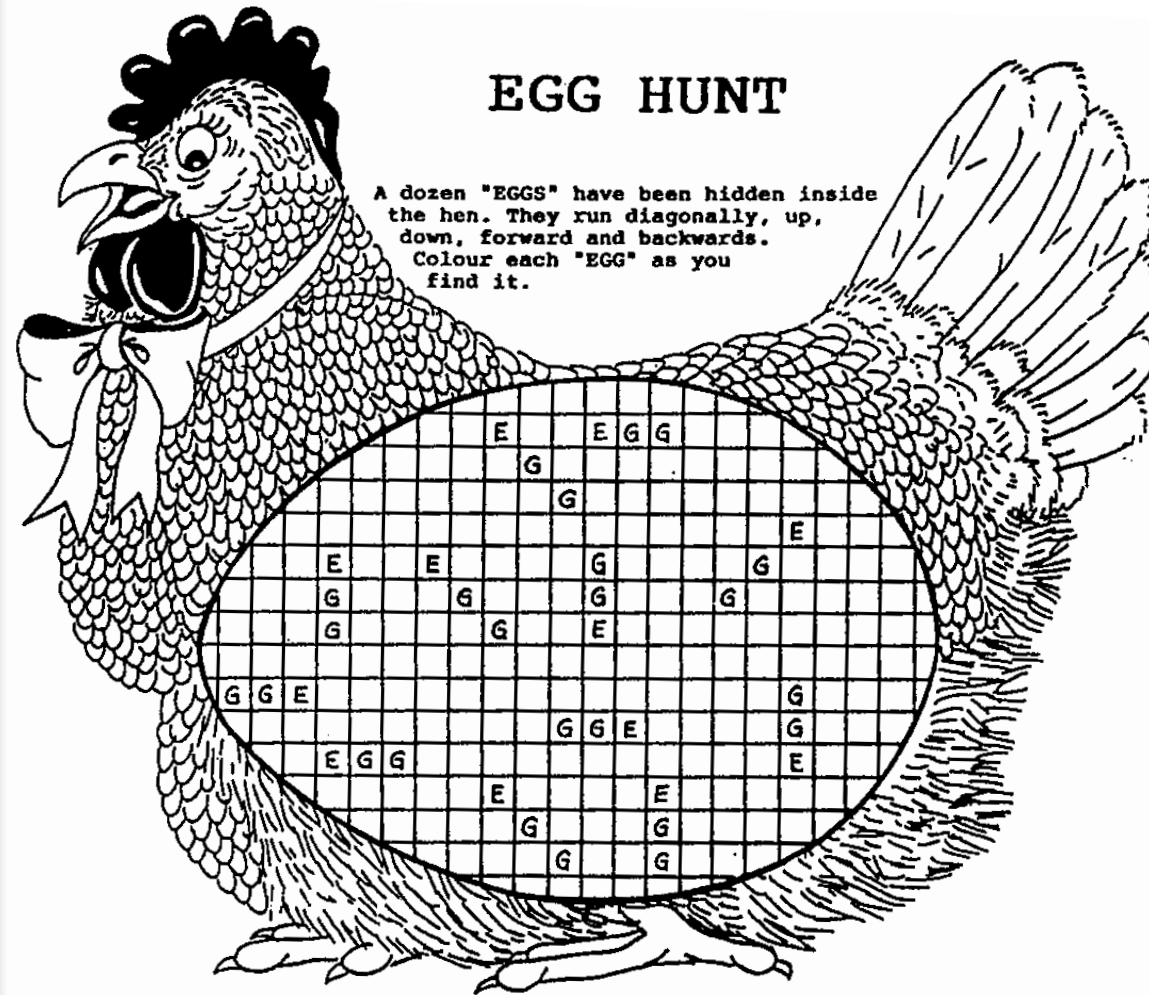
A dozen "EGGS" have been hidden inside the hen. They run diagonally, up, down, forward and backwards. Colour each "EGG" as you find it.



ANSWER KEY

EGG HUNT

A dozen "EGGS" have been hidden inside the hen. They run diagonally, up, down, forward and backwards. Colour each "EGG" as you find it.



Identify and unscramble the letters in egg to spell a word that is "a way to cook an egg" or "an egg recy..."

 scrambled	 crepes	 souffle	 meringue
 omelette	 poached	 hard-boiled	 french toast
 deviled eggs	Student name: _____		