Each player controls the pits and counters on his side of the board, and the “home” container on the right. During the game, tokens are moved counterclockwise (to each player’s right) around the board. The winner is the player who ends the game with the most tokens in his home container.

The first player takes all tokens from any pit on his side. He then distributes these tokens counterclockwise. He puts one token into each successive pit, including his own home container and each pit of his opponent. (Tokens are not put in the opponent’s home container.)

When the tokens from the chosen pit have all been distributed, the player’s turn ends. If the last token was placed in the player’s home container, he takes another turn. If not, the other player repeats steps 3 and 4.

If the last token on a turn goes into an empty pit on the player’s own side, that sets up a capture. The final token played, and any tokens in the opposite pit (of the other player), are considered captured. These tokens are placed in the home container of the player whose turn it is. A capture ends a turn.

Players take turns until one player has no tokens in any of the pits on his or her side. At that point, the player who still has tokens in pits removes them to his home container. The player with the most tokens in the home container wins the game.
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Search for Buried Treasure!

Are you ready to dig into history and discover the wonders of an ancient world? Grab your digging tool and brush. It’s time to search for buried treasure—just as archaeologists do!

Archaeologists are scientists who study the way people lived long ago. They do this by digging up and studying the tools, pottery, and even buildings that ancient people left behind. For many years, archaeologists have been studying the treasures of ancient Egypt.

Now, you can, too.

Here’s everything you’ll need:

Archaeologist’s Guide Book
This guide book contains instructions, background history, a special hieroglyphic code, data cards and games.

Mystery Matrix
Your four buried treasures are hidden inside the Mystery Matrix. The Mystery Matrix Clay can also be recast for hours of additional fun.

Excavation Tools
Proper tools are very important to an archaeologist. We’ve included a special digging tool and a brush for use in uncovering your buried treasures.

Mystery Matrix Molds
The tray that holds your kit can be used to recast the Mystery Matrix Clay. You can reform the Mystery Matrix or even make your own pyramid or sphinx!
Background Data: Ancient Egypt

Archaeologists do much more than dig up ancient objects. They also find out everything they can about them: who made them, what they were used for, how old they are and what they meant to their owners. To answer these questions, archaeologists must learn as much as they can about the land and the people from which the objects came.

To better understand the treasures you will find, you’ll need to know something about ancient Egypt.

Egypt—The Land by the Nile

For thousands of years, people have lived along the banks of Africa’s greatest river, the Nile. For the early Egyptians, this river was truly the source of life. Fish from the Nile fed their families. Its waters carried boats the length of the country, allowing Egyptians to develop trade with other peoples. And, once each year, the river overflowed, depositing a rich layer of silt along its banks. This silt made productive farming possible even at the edge of the world’s greatest desert!

Cities grew up along the Nile and over time a great civilization developed.

The People of Ancient Egypt

For thousands of years, Egypt was ruled by pharaohs. The Egyptians believed that the pharaoh was not only a king, but a god as well. The pharaohs were very powerful and had great wealth.

In Egyptian life, the pharaoh, nobles, high priests and chief scribes enjoyed all the good things of the land. They lived with their families in fine houses, ate a wide variety of wonderful food, and were waited upon by servants. The nobles fished and hunted and watched over the running of the government. They also planned great building projects pyramids and other monuments built by the ancient Egyptians can still be seen today.
It was the job of the scribe to record information about Egyptian life. The scribes of ancient Egypt developed a system of writing called hieroglyphics. They kept careful records of crops grown and cattle raised, tracking the many details of running a great empire. They also wrote down laws and the teachings of the Egyptian religion. Scribes held an honored position in Egyptian life. Because of their work, we know many things today about Egypt’s past. On the artifacts you find, you will see hieroglyphics like the ones recorded by scribes.

The priests organized public ceremonies to honor the many gods worshipped by the Egyptians. Temples were built and offerings were made to the sun gods Ra and Amon-Re. Many other gods, including Horus, the sky god, Osiris, the god of the underworld, and Isis, the mother goddess, also received sacrifices from the priests and people.

A middle class of merchants and craftsmen served under the nobility. Sailors, cloth makers, sculptors and stonemasons, all were trained to perform their tasks. These people had small homes and modest comforts in furniture, clothing and food.

The common people worked the farmlands. Their families lived in one-room mud huts. They wore very simple clothing, and ate a share of food from the crops they harvested. During the dry season, they provided the muscle power used to construct the pharaohs’ great pyramids and memorials.
Preparing for the Afterlife

The ancient Egyptians worshipped many gods. They also believed that death was not the end of life, but a passing from this world to another. They believed that after death a person’s spirit stayed near the physical body. It was very important then that the body be well preserved so the spirit would not be homeless. Because of this, Egyptians developed a way to mummify, or preserve, dead bodies.

To make sure they had all they needed on their journey to the afterlife, wealthy Egyptians were buried with great treasures, foods, favorite possessions and even rooms full of furniture. The famous pyramids of Egypt were built as tombs for the pharaohs. The pyramids were robbed of their treasures thousands of years ago. In time, pharaohs began to hide their gold-filled tombs in the cliffs of the Valley of the Kings rather than letting everyone know where their riches could be found.

The Egyptian Empire

For two thousand years, Egypt was one of the most important and powerful nations in the world. Its traders brought goods from across the Mediterranean Sea. Its army controlled lands and people south into Africa and north into Syria and Palestine. The buildings and monuments the Egyptians built still amaze us today. Their art and culture influenced people in southern Europe, western Asia and northern Africa.

Gradually, internal struggles for power weakened Egypt, and other nations took its wealth and lands. The Greek ruler, Alexander the Great, conquered Egypt, and his general Ptolemy seized power after his death. Later, Rome defeated the last of...
Egypt’s royalty, Queen Cleopatra VII. Finally, as the Roman Empire crumbled, Muslims from Arabia seized control of the land of the Nile.

Ancient Egypt . . . Today

Although the pharaohs of Egypt are gone, many of their pyramids, temples, monuments and artifacts remain to tell us about Egyptian life long ago. Archaeologists still explore the tombs in the Valley of the Kings, and they still seek answers to questions about this great civilization.

Your Mystery Matrix holds artifacts like those found by archaeologists. If you’re ready, it’s time to begin your trip into the past for a Buried Treasure Egyptian Dig.

Directions: Excavate Your Buried Treasures

Before You Begin

Set up a place to work. (The area you choose must remain undisturbed while you complete your excavation.) Spread out plenty of sheets of newspaper. Work on a floor or table counter that can easily be cleaned off when you’re finished.

You’ll Need:

- the Mystery Matrix
- your digging tool
- your brush

Follow These Steps

Before beginning, read all the directions carefully.

1. Carefully examine the surface of the clay matrix before you start. Look for bumps or dents that might show where one of your artifacts is buried.

2. Gently start to scrape away the edge of the clay with your excavation tool. *BE CAREFUL TO KEEP THE SHARP END OF THE TOOL POINTED AWAY FROM YOUR EYES, BODY OR OTHER HAND. WEAR WORK
GLOVES (GARDENING GLOVES WORK FINE) TO PROTECT YOUR HANDS AS YOU WORK.

Work slowly and carefully so you don’t scratch or damage any artifacts with your tool. Remember, the artifacts could be buried anywhere inside the matrix.

IMPORTANT:
As you work, save all the clay that made up the matrix. Don’t throw it away or let it fall onto the floor. When you’ve found all of your artifacts, you’ll be able to recast this clay into a new matrix or other figures. (See pages 25-27 for directions.)

When you see an artifact showing through the clay, be careful not to scratch it with your tool. Carefully dig out the clay from around the artifact. When you’ve uncovered its top and sides, start to dig out the clay under neath it. Never try to pull a specimen from the clay before you’ve dug completely around it. The artifacts might break if not removed gently.

After you’ve freed your first artifact from the clay, place it on the newspaper. Use the excavation tool to remove any big clumps of clay from the artifact. Then use the brush to dust off the remaining clay. You can use a damp cloth or carefully rinse with water to clean off the residue once all of the clay has been removed.

Follow these steps until you have found all four of the artifacts. As you find each one, fill out a Data Card (pages 14-16).
Record your data

When an archaeologist digs up an artifact, he or she writes down where it was found, what it looks like, and any other information that might be important.

Fill out one Data Card (pages 14-16) for each artifact you find. You’ll need to check out the Fact Sheets on pages 17-20 to answer some of the questions on the Data Cards.
ARTIFACT 4

Draw a picture of your find. Color it.
Describe the object.

What do you find most interesting about this artifact?

What is the artifact?
What did this artifact mean to an ancient Egyptian?

TREASURE FACT SHEETS

Here’s some information about the treasures you discovered.

ANUBIS

This figure represents Anubis, protector of the dead. Sometimes, Anubis is seen as a four-footed jackal or dog. In other images, the god is shown in human form with a jackal’s head, as in this amulet. (An amulet is a small object worn as a charm against evil.) In many Egyptian tombs, Anubis is pictured at a balance scale. He weighs the heart of the person who has died against a symbol of truth. Egyptians believed that Anubis was the guide who would show them the way to the afterlife. The Egyptian city where Anubis was principally celebrated was called Kynopolis, Greek for “Dog City.”

Your figure of Anubis has an opening at the top between the ears. If you like, you can thread string, yarn, or a thin strip of leather through this opening and wear the figure around your neck or wrist. (Your ankh and scarab can also be worn this way.)
The TABLET

Official and religious records were written by scribes in a picture writing called hieroglyphics. (Learn more about hieroglyphics on page 21.) Usually, hieroglyphics were painted with a small reed brush. Sometimes they were carved in stone or tooled into soft clay. Your tablet represents just such a record. The hieroglyphics pictured on the tablet (and on other artifacts) were specially designed for this kit. They are used as a code for English words.

Look at the side of the tablet with the large eye. The hieroglyphics under the eye tell about this symbol. The word on the left is the name of the Egyptian god this eye represents. The word on the right is another name for this eye symbol.

On the back of the tablet is a much longer message in hieroglyphic code. It was inspired by blessings from the religious writings of ancient Egypt.

Like real archaeologists, you can try to decipher these messages. Use the hieroglyphic alphabet on page 22 to see if you can translate them. (The answers are in the back of this guide book.)

The ANKH

The cross with a looped top is an ankh, a hieroglyphic meaning life. It was also a religious symbol thought by some to represent the key to the afterlife. In many paintings found on the walls of Egyptian tombs, gods, pharaohs, and other important people are shown carrying ankhs.

Look carefully at the carvings on your ankh. The beetle on one side is called a scarab. (You’ll find out more about scarabs on page 20.) Beneath the scarab are hieroglyphics. These spell out the name of an Egyptian god of the afterlife who is often pictured carrying an ankh.

On the other side of the ankh is a picture of an animal that was very important to the Egyptians. It was important because it protected their grain—a valuable food supply. Can you guess what animal this is? The hieroglyphics beneath the picture spell out the name of the Egyptian goddess for whom this animal was sacred. In fact, pictures of this goddess often show her with the head of this animal.
The SCARAB

The most common Egyptian artifact is the scarab. The scarab is a carving or an amulet that looks like the scarab beetle (also known as the dung beetle).

The Egyptian dung beetle often has golden colors on its back. This coloring and the beetle’s rounded shape reminded Egyptians of the sun. The sun god, Ra or Amun, was one of the most important figures in the Egyptian religion. He was sometimes thought to appear as a scarab beetle.

The scarab beetle can often be seen burrowing up through the soil along the banks of the Nile. To the ancient Egyptians, the beetle looked like it was coming back to life after dying. The scarab became a powerful symbol of immortality.

The artifact you uncovered has a coded English word on the inside. It names this amulet. Can you decode the hieroglyphic message?

Hieroglyphics

Five thousand years ago, the Egyptians developed a system of writing using pictures. This system was later called **hieroglyphics**, from the Greek words meaning “sacred carvings.”

Hieroglyphics could be written from left to right, like English, from right to left, like Hebrew, or even from top to bottom, in a column-like form. Egyptians read from whatever direction the hieroglyphics faced.

The first hieroglyphics were simple pictures of things. A picture of a lion, for example, meant lion. Later, certain pictures were used to represent single sounds, as do the letters of our own alphabet. The sound of “n,” for example, was represented by the symbol for water. Still other symbols represented ideas, like happiness or sadness. In time, all of these symbols were used together, as they are on this obelisk. Since they were not always used the same way each time, hieroglyphics became very complicated.
A Hieroglyphic Alphabet
Here are twenty-five symbols that closely match the sounds of the English alphabet. The hieroglyphics pictured here each represented one sound, much like the letters used in many modern languages.

<table>
<thead>
<tr>
<th>Hieroglyphic Alphabet</th>
<th>Hieroglyphic Alphabet</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (like in hat)</td>
<td>a (like in play)</td>
</tr>
<tr>
<td>B</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>e/y (like bê or baby)</td>
</tr>
<tr>
<td>F/V</td>
<td>G</td>
</tr>
<tr>
<td>H</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>J/DG</td>
</tr>
<tr>
<td>K/hard C (like in gap)</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Õ</td>
</tr>
<tr>
<td>P</td>
<td>Qu/Kw (like in Queen)</td>
</tr>
<tr>
<td>R</td>
<td>S/soft c (like in rage)</td>
</tr>
<tr>
<td>T</td>
<td></td>
</tr>
<tr>
<td>u/oo/w (like in ugh)</td>
<td>X</td>
</tr>
<tr>
<td>Z</td>
<td>SH</td>
</tr>
<tr>
<td></td>
<td>TH</td>
</tr>
</tbody>
</table>

The Mystery of Hieroglyphics Solved
The use of hieroglyphics gradually faded out. In time, no one knew how to read them at all. Over the years, many artifacts were found bearing hieroglyphics, but no one could translate them. It seemed that ancient Egypt would keep its secrets for all eternity.

Then, in 1799 a French soldier found a large tablet with the same message written in three languages. This find, known as the Rosetta Stone, eventually allowed scholars to unlock the meaning of hieroglyphics.

Using Hieroglyphics
Names of the gods and pharaohs were among the first hieroglyphics to be understood. A pharaoh's name was placed within a loop called a cartouche.

In this example, some of the hieroglyphics are stacked on top of each other. This was often done by Egyptian scribes just for the artistic effect—it looked better that way!

Sometimes hieroglyphics were part of large paintings.

The hieroglyphics in such paintings faced the same direction as the person they described.
Solving Hieroglyphic Code

Here are some English words written with a hieroglyphic alphabet. See if you can figure out what they mean. Use the hieroglyphic alphabet on page 22.

Directions: Recasting your Mystery Matrix Clay

You can use the Mystery Matrix Clay over and over again.

- Excavate your Egyptian treasures once more by casting a new Mystery Matrix.
- Create a whole new mystery! What would an archaeologist of the future find in a Mystery Matrix excavated at your house or school? Cast a new matrix, but place in it artifacts of your own (coins, keys, small plastic toys — anything that won’t be harmed by water).
- Make miniature replicas of the great monuments of the pharaohs: a pyramid or a sphinx!
- Use the clay to mold shapes of your own!

Here’s how to recast the Mystery Matrix Clay!

1. Spread newspaper or another protective covering on your work area.
2. Pour the broken pieces of clay and the clay powder you have saved onto this area.
3. Use a small hammer or mallet to carefully break any large lumps of clay into powder. (Note: Be sure to wear eye protection!)

See answers on back cover.
4 Spoon the powdered clay into the mold you’re going to cast. Count how many tablespoons it takes to fill the mold.

5 Next, pour the clay powder from the mold into a mixing bowl. Put 2 more tablespoons of clay powder into the bowl.

   For a new matrix, add all remaining powder, measuring it by the tablespoon.

6 Add warm or hot water to the clay powder. For every 2 tablespoons of powder you’ve put in the bowl, add 1 teaspoon of water.

7 Mix water and clay until they are blended into a thick grainy paste. Like “spoon cookie” dough, it should stick to a spoon even when you turn the spoon over.

8 Spoon this paste into the mold, packing it in solidly.

   If you are making a new matrix, cover the bottom of the mold first. As you fill the mold, put each artifact into the new matrix. Surround each artifact with clay paste.

9 Continue putting the clay paste into the mold until it is full. Smooth the top of your filled mold, tapping the paste gently with the back of the spoon to make sure the mold is well packed.

10 Set the mold outdoors to dry in the sunshine for 3-1/2 to 8 hours. The time needed depends on the weather. If it’s hot and dry, your mold will dry more quickly. If it’s humid, drying time will be longer.

   You can also set the mold under an incandescent light bulb. Place it no closer than 6 inches (15 cm) from the bulb. Drying time will vary indoors, but could take up to 24 or even 36 hours.

11 When the clay is dry, it fades from the dark color of the paste to the lighter tone of the original matrix and powder. Gently press the edge of your thumb into the clay. If it’s still soft, like ripe fruit, it needs more drying time.

   When the paste is almost dry, turn the mold over and gently wiggle its plastic walls to free the newly cast clay.

12 If you made a sphinx, you can use your excavation tool to carve details of the face. Look at the illustration of the Great Sphinx of Giza on page 28 for ideas.

   (HINT: As you carve, you can smooth out mistakes. Use the tip of a finger and rub the clay very gently. This technique will also add to the weather-beaten look of your carving.)

   Did you know the real monument had its nose shot off in the 18th century by the troops of Napoleon!

13 Remember—save your Mystery Matrix Clay any time you break up or carve a cast piece. You can reuse it many times.
About the Monuments:

**PYRAMID**

Pharaohs and their queens were buried in pyramids, tombs for the rulers of ancient Egypt. More than seventy were built, and more than thirty of these can be seen today along the Nile River. The largest and most famous is the Great Pyramid of Giza, built for the pharaoh Khufu. It stands about 450 feet tall (140 meters) and has long been considered one of the architectural wonders of the world.

**SPHINX**

The sphinx is a mythological creature with the body of a lion and the head (and sometimes the chest) of a human being. In ancient Egypt, the strength of the lion joined with the intelligence of a human symbolized the power and authority of the pharaoh. Many images, sculptures and carvings of the sphinx have been found. The best known is the Great Sphinx of Giza. It is sculpted from a natural bluff and is 240 feet (73 meters) long and 66 feet (20 meters) high.

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**MANKALA: A GAME OF ANCIENT EGYPT**

The ancient Egyptians loved to play games. Mankala is a game of strategy that was played in many parts of Africa, under many different names. To play Mankala you will need:

- an egg carton
- 48 counting tokens
- two plastic butter tubs (or other small containers)

Buttons, bingo tokens, dried beans or plastic beads can be used as tokens. People who lived near the seashore used very small shells as tokens when they played this game. Smooth pebbles were used in many places. The color and shape of the tokens make no difference to the game.

**The object of the game** is to capture as many of the tokens as possible by placing them into your “home” container.

1. To start the game, two players face each other on opposite sides of the egg carton. An empty container is placed at each end. Place four tokens in each of the openings in the egg carton. Each opening is called a “pit.”