I love the James River. Without it, Lynchburg would not have been settled as early as 1750!

Yes, throughout history people have settled on rivers and developed cities and towns there. Let's visit another historic river!

Seasonal rain fell farther south in Africa, causing the Nile to overflow its banks and flood land beside the river. When floodwaters receded, a rich, black soil called silt that was good for farming covered the area. The sun provided the heat and light necessary for crops to grow in the silt.

Ancient Egyptian civilization grew by the Nile River because it was a water highway, transporting people and their goods. The Nile begins here in the highlands of East Africa and flows north through what we now call the Sudan and Egypt. Desert conditions are hot and dry, so the Nile was a lifeline for Egyptians.

Ancient Egyptians grew grains, vegetables, and fruits. Emmer, a type of wheat and barley, was used in bread, an important part of the Egyptian diet. They farmed with simple tools such as hoes, sickles, and baskets.

Living things need water to survive in the desert, that's for sure!

Ugh! They were hard workers! This is not easy!
HEX, ANTE, SOMEONE SCRIBBLED ON THIS WALL. THAT'S NOT NICE!

THOSE ARE NOT SCRIBBLES, SCORPY. THAT'S THE WRITTEN LANGUAGE ANCIENT EGYPTIANS USED - HIEROGLYPHICS ("HI-RO-GLIF-ICKS").

HIEROGLYPHICS IS A SYSTEM OF WRITING USING SYMBOLS AND PICTURES. THE NAME MEANS "SACRED CARVING" IN GREEK (THE GREEKS FOUND THE WRITING ON OLD MONUMENTS). THE ANCIENT EGYPTIAN MEANING OF THIS WORD IS "LANGUAGE OF THE GODS."

HIEROGLYPHICS WERE TIME-CONSUMING TO MAKE. ONLY A FEW EGYPTIANS, SUCH AS THIS SCRIBE, COULD READ HIEROGLYPHICS. THEY USED A STYLUS TO WRITE ON PAPYRUS, A KIND OF PAPER. THEY WROTE IN LONG LINES FROM RIGHT TO LEFT AND TOP TO BOTTOM. THEY HAD NO SPACES OR PUNCTUATION AND NO SYMBOLS FOR VOWEL SOUNDS.

FOR CENTURIES PEOPLE COULD NOT TRANSLATE HIEROGLYPHICS. THEN IN 1799, FRENCH SOLDIERS DISCOVERED A LARGE GRANITE SLAB THAT HAD THE SAME WORDS WRITTEN IN THREE LANGUAGES: GREEK, DEMOTIC SCRIPT, AND HIEROGLYPHICS. IT WAS FOUND NEAR THE EGYPTIAN TOWN OF ROSETTA, SO IT WAS CALLED THE ROSETTA STONE.

FRENCHMAN JEAN FRANCOIS CHAMPOLLION STUDIED THE STONE AND FIGURED OUT THE MEANINGS. HE WAS THE FIRST MODERN PERSON TO READ HIEROGLYPHICS!

COOL - BUT I THINK I'LL STICK TO MY ABC'S!
IS IT LUNCHTIME YET, ANTE? I'M NOT SURE IF MY WATCH IS WORKING IN ANCIENT EGYPT.

YOU CAN THANK THE ANCIENT EGYPTIANS FOR INVENTING THE FIRST TIMEKEEPING PIECE.

THE FIRST THING THEY DEVELOPED WAS A SHADOW CLOCK - A VERTICAL STICK OR OBELISK WHICH IS SLENDER, TAPERED, AND FOUR-SIDED. THE LOCATION OF THE SHADOW COMING FROM THE OBELISK WOULD SHOW THE TIME OF DAY. THEY ALSO DEVELOPED A SHADOW CLOCK SO SMALL THAT THEY COULD CARRY IT AROUND!

CHECK OUT THOSE HIEROGLYPHS!

THIS IS A CALENDAR IN HIEROGLYPHS THE EGYPTIANS CREATED BASED ON THEIR OBSERVATIONS OF THE MOVEMENT OF THE SUN AND THE STARS. THEY USED CALENDARS THE WAY WE DO: TO RECORD HISTORICAL EVENTS AND SCHEDULE FESTIVALS AND HOLIDAYS!

THE EGYPTIANS ALSO NEEDED A CALENDAR TO SHOW WHEN THE NILE RIVER WOULD FLOOD EACH YEAR. THE ANCIENT EGYPTIANS HAD 360 DAYS IN A YEAR BUT ADDED 5 MORE FOR THE BIRTHDAYS OF SOME OF THEIR GODS. SO THEIR CALENDAR HAD THE SAME NUMBER OF DAYS AS OUR CURRENT CALENDAR.

THOSE EGYPTIANS WERE SURE AHEAD OF THEIR TIME!

WOW - THE FIRST WATCH!
ANTE, ARE THEY PERFORMING SURGERY ON THAT EGYPTIAN?

SCORPY, THAT IS A PHARAOH ("FAIR-O"), AN ANCIENT EGYPTIAN RULER. AND HE'S NOT ASLEEP. HE'S DEAD.

SO WHAT ARE THEY DOING TO HIM IF HE'S DEAD??

SELECTED ORGANS ARE PRESERVED AND PUT IN SPECIAL "CANOPIC JARS." THEN THE WHOLE BODY IS COVERED WITH NATRON SALT FOR 40 DAYS.

THE NATRON DRIES HIS SKIN. LATER THE EMBALMERS RUB THE SKIN WITH OIL TO MAKE IT SOFTER.

THE EMPTY SPACES IN THE CHEST CAVITY WHERE HIS ORGANS WERE ARE THEN STUFFED WITH RAGS AND SAWDUST.

BEFORE BURIAL THE BODY IS WRAPPED IN MANY LAYERS OF LINEN BANDAGES.

70 DAYS AFTER THE PHARAOH'S DEATH, HIS COFFIN WILL GO INSIDE A LARGER COFFIN CALLED A SARCOPHAGUS AND BE CARRIED TO A PYRAMID - HIS SPECIAL TOMB.

70 DAYS FOR A BURIAL FIT FOR A KING!

WHOA! HE'S GOING TO LOOK LIKE A MUMMY WHEN HE'S DONE!
It's great to be back at Amazement Square. I love the architecture gallery! This is great fun putting the lid on the triangle, Ante.

This is not an ordinary triangle, Scorp. This is a model of a pyramid used as a burial tomb for Egyptian royalty. This is the great pyramid located near Giza. It is the largest pyramid ever built by the Egyptians and is the only one of the original seven wonders of the world to still stand.

The work of quarrying, moving, setting, and sculpting the stone was done by hand. It is believed that as many as 35,000 workers -- such as architects, engineers, carpenters, bakers, and water carriers -- built the pyramid for the pharaoh.

Wow! That's quite a team!

Inside the pyramid is a complex series of passages leading to several rooms. In the center is the king's chamber, where the pharaoh's body goes. Other rooms hold things for him to use in the afterlife: his favorite foods, chariots, boats, clothing, beds, and weapons.

Hmm. Ancient Egyptians thought you could take it with you!