



#### Background scene:

Play this video in the background on a big screen, smart board, or laptop with the sound muted.

Zytglocgge, Zeitglockenturm, Clock Tower <a href="https://www.youtube.com/watch?v=aQNRNOYEUT4">https://www.youtube.com/watch?v=aQNRNOYEUT4</a>



# Storytelling Role-Play: 1-5 sand dollars each (2 Students to help cut out props and 4 students to role play)

Choose 2 girl volunteers and 1 boy volunteer to be the mother, Einstein, and the cat. Let the rest of the students join in when the clock strikes, and allow each to make the bell strike 3 at slightly different times, staggered by a second or so. Students can chime row by row or group by group.



#### New word: 1-5 sand dollars

**Patent**: You can get a patent from the government so someone can't steal your invention idea and make money from it. With a patent your idea is protected for a certain amount of time so people can't copy your work without your permission.

#### Day 3 Albert Einstein: Hatching Ideas!

It is 1902, and Einstein is sitting at his desk in Room 86, on the third floor of the Patent Office building. He ie examining patent applications. (Patent prompt, hold up the paper and study it carefully) This means he uses his wonderful analytical skills to examine papers about new inventions. He is responsible for deciding if the ideas people submit are different and unique enough to be protected by the government so that nobody else can make money off of them. If the ideas are good, he gives them a seal of approval. (Approved seal, use it like a stamp on the paper).

The majestic Zytglogge (Clock Tower) of Bern strikes once, twice, thrice in its elaborate medieval dance, piercing through the capital and tugging Einstein out of his deep daydream. The city is a symphony of ticking seconds and chiming bells, each slightly out of time with the next.

Suddenly, he hears a ruckus outside. "AGAIN?" shouts an angry mother carrying groceries. (Basket, dry meat and zopf bread prompt. Carry the groceries). "I've missed the train again? Oh, my chickies are not going to be happy about this. Whenever I go into town to get the groceries and come back by train, I always end up missing the connection! My horse carriage was a lot more reliable, I tell you. These newfangled things just don't work." Upset, she drops the very groceries she traveled so far to get. The dried meat falls with a thud to the floor outside Einstein's window and a cat rushes in to have a bite. (Cat prompt. The mother drops all the groceries and the cat rushes in).

As Einstein watches the chaos, he thinks about the new invention that recently crossed his desk for a way to keep clocks synchronized. According to the new patent application, an electromagnetic bell could help keep time constant throughout the city by using telegraph systems to send time signals far away. He recognizes the usefulness of this invention.

Einstein himself goes on to file over 50 patents in his life to protect his ideas. However, what really draws him in is the science and theory behind these inventions. It is that scientific knowledge that made the inventions possible, and as he goes through his work, he always wonders, dreams, and imagines about the scientific questions he has.

Slowly and gradually, much like how the geometry pieces would fit snugly together when he was little, Einstein's imaginative theories and questions start falling into place.

#### Day 3 Albert Einstein: Hatching Ideas!



Questions/Reading discussion: 1-5 sand dollars

Ask: What was Einstein's job in 1902?

Example: He looked at patents and approved them.

Ask: What was the problem with clocks in Bern at the time?

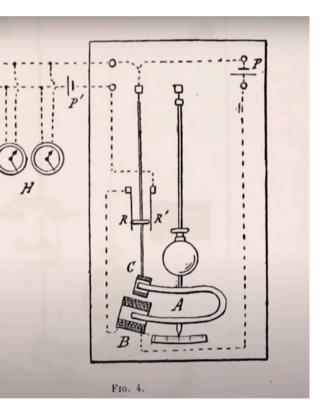
Example: They didn't all tell exactly the same time because they weren't

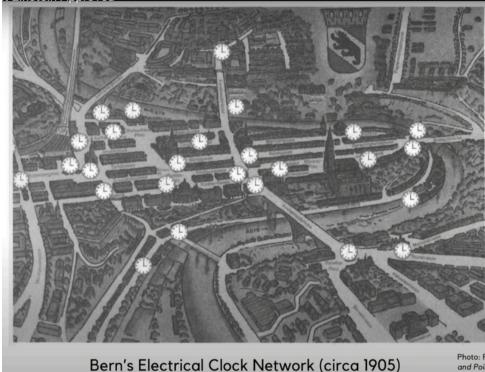
synchronized.

Ask: How do you think scientists and inventors work together? What do

you find most interesting? Why?

Answers will vary. Allow students to be imaginative.





Bern's Electrical Clock Network (circa 1905)

The clock problem and solution (above) and a note by Einstein rejecting a different patent application.

1) Der Paten Vaugeneh ist inkorrekt, ungeren 2) Auf die einzelieur Mangel der Berchrei-Lung kommen wir cret dann eintreten,



Day 3: Albert Einstein story student props.

Mother: Carry

Nother: Carry

Zopf bread in

Zopf bread in

Your basket

Your basket

and drop it

and drop it

when you are

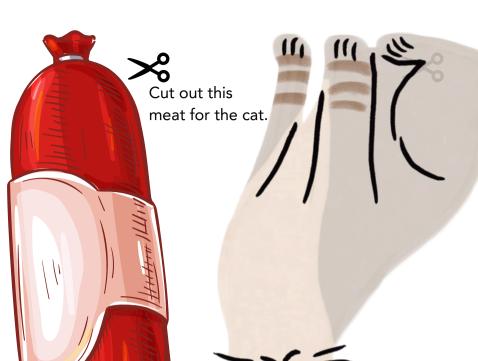
shouting.

**Einstein:** Place the seal on the paper and stamp down your fist. Say Approved!

#### Mother:

Carry zopf bread in your basket and drop it when you are shouting.

Mother: Use this basket to carry your groceries.





Cut out this cat for a student to be.



X

Cut out this patent for Einstein to approve.

## EIDGEN. AMT FÜR



### **GEISTIGES EIGENTUM**

### PATENTSCHRIFT

Nr. 39619

30. März 1907, 8 Uhr p.

Klasse 61

#### **HAUPTPATENT**

KAMMERER & SCHNEIDER, in Schonach i/B. (Deutschland).

Wetteranzeiger, der durch die Feuchtigkeit der Luft beeinflußt wird.

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**Mother:** Drop the meat when you are upset and make a thud sound.

Cat: Rush in and eat the meat.
Say, "Meow!"

**Einstein:** Study this patent thoughtfully before giving it the approval seal.