

# “Guess Who’s Coming to Class Today?” – Classroom Visits by Core Knowledge® Heroes

**Grade Level:** Grade 1/ Science Biographies

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**Length of Unit:** 7 days

## I. ABSTRACT

Students will be introduced to science units of study found in the Grade 1 Core Knowledge Sequence by “meeting” famous personalities who make personal “visits to the classroom”. Teachers dress as persons such as Louis Pasteur, Rachel Carson, Thomas Edison and others listed in the sequence and talk to the children about their lives, what interested them, their contributions, and why those contributions are important. “Visits” are personalized with comments about being invited to the particular school or classroom and children are encouraged to participate in activities to reinforce the concepts to be taught in that particular topic area. The experience of “meeting” the personality before going into more depth in that area gives background knowledge and something for the children to “latch onto”. This activity is especially beneficial to the ESOL child who may have very limited experience in the topic area as well as difficulty understanding the language.

## II. OVERVIEW

### A. Concept Objectives

1. Student will recognize by name an important figure in science.
2. Students will be able to offer at least one fact about that important figure in science.
3. Students will be able to state verbally why this person is important.
4. Students will be able to write about an important figure in science.

### B. Content from the *Core Knowledge Sequence*:

1. Environments are constantly changing, and this can sometimes pose dangers to specific habitats, for example: effects of population and development, rainforest clearing, pollution, and litter.
2. The Human Body – Germs, diseases, and preventing illness – taking care of the body, exercise, cleanliness, healthy foods, rest, vaccinations.
3. Introduction to Electricity – Basic parts of simple electrical circuits (for example, batteries, wire, bulb or buzzer, switch). Also, safety rules for electricity.

### C. Skill Objectives:

1. Students will listen to and actively participate in a presentation given by the “visitor” for the day.
2. Students will retell verbally what the day’s “visitor” shared with the group.
3. Students will produce a journal entry about the “visitor” for the day with spelling sufficient to be able to read the words himself or herself.
4. Students will write sentences about the “visitor” using capitalization for the first word of a sentence, for names of people, and for the pronoun I.
5. Students will use correct end punctuation.
6. Students will locate on a map the “visitor’s” homeland.
7. Students will classify famous persons with their contributions.

## III. BACKGROUND KNOWLEDGE

### A. For teachers:

1. Birch, Beverly & Christian Birmingham. *Pasteur’s Fight Against Microbes (Science Stories Series)*. New York: Barrons, 1996. ISBN 0812097939

2. Cousins, Margaret. *The Story of Thomas Alva Edison*. New York: Random House, 1965. ISBN 0394848837
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7. Ransom, Candace F. *Listening To Crickets, A Story About Rachel Carson*. Minneapolis, Minnesota: Carolrhoda Books, Inc., 1993. ISBN 0876147279
8. Ring, Elizabeth. *Rachel Carson, Caring for the Earth*. Brookfield, Connecticut: The Millbrook Press, 1992. ISBN 15602940562

#### IV. RESOURCES

- A. Hirsch, Jr. E. D. *What Your First Grader Needs to Know*.
- B. Hirsch, Jr. E. D. *What Your Second Grader Needs to Know*.
- C. Beals, G. "Major Inventions and Events in the Life of Thomas Alva Edison" [On-line]. Available URL: <http://www.thomasedison.com/Inventions.htm>, 1996
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- I. Rhee, Seung Yon. "Louis Pasteur" *Access Excellence* [On-line]. Available URL: [http://www.accessexcellence.com/AB/BC/Louis\\_Pasteur.html](http://www.accessexcellence.com/AB/BC/Louis_Pasteur.html), 1999

#### V. LESSONS

##### Lesson One: Rachel Carson

- A. *Daily Objectives*
  1. Concept Objectives
    - a. Students will be able to recognize the name Rachel Carson.
    - b. Students will be able to state one fact about Rachel Carson.
    - c. Students will be able to state what important contribution Rachel Carson made to society.
  2. Lesson Content
    - a. Rachel Carson will "visit" the classroom and talk to the students about her life, her interests, and her contributions to society.
  3. Skill Objectives
    - a. Students will listen to the presentation and interact with the "visitor".
    - b. Students will produce a journal entry about the "visitor" for the day with spelling sufficient to be able to read the words himself or herself.
- B. *Materials*
  1. Books about Rachel Carson including, *Listening to Crickets, The Story of Rachel Carson*, by Candace Ransom.

2. Microscope, sea shells, stuffed sea birds, or other animals of the seashore, plastic rings from soda cans, and other items that can be shown to illustrate what pollutes our waters.
3. Women's clothing of the 1950's era to dress as Rachel Carson would have during her adult years.
4. Students' science journals

C. *Key Vocabulary*

1. pollution – environmental contamination with man-made waste
2. litter – trash, wastepaper, or garbage lying scattered about
3. environment – one's surroundings
4. chemical – a substance obtained by a chemical process
5. nature – the external world in its entirety

D. *Procedures/Activities*

1. Explain to the children that a special visitor is coming to the class today. Set the mood for the visit by telling the children that this special "visitor" is very interested in meeting the children in this particular class and talking to them about what he or she has done in his or her lifetime. Statements such as "...just flew in from France", or "...has come especially to see the students in Mrs. Jones' class" raises the interest level of the students.
2. "Rachel Carson" comes into the classroom with the various props she has brought with her and talks with the children about her life and accomplishments. The presentation needs to be interactive in order to hold the interest of the children and allow them to ask questions, make comments and comparisons, and draw parallels as they come to mind. Specifics about Rachel's childhood and growing up years are shared and compared to what children's lives of today are like so a sense of difference in time periods can be established with the children.
3. The presentation should last about 15- 20 minutes. At the end, "Ms. Carson" tells the class that she has to leave now but that she is so glad to have had the opportunity to meet such a great group of kids and that she hopes they continue to share the message she tried to convey to all about conservation and stopping pollution.

Science Center Extensions:

1. A display can be arranged to show items that pollute our environment and alternatives to polluting and littering. Pictures of Rachel Carson and her books can also be displayed.
2. Students should write a sentence or draw a picture about one thing they remember about Rachel Carson.

E. *Assessment/Evaluation*

1. Teacher will collect the science journals and assess how well the children understood the information presented about the importance of Rachel Carson's contributions.
2. Teacher observation of student participation in class discussion.

**Lesson Two: Rachel Carson**

A. *Daily Objectives*

1. Concept Objectives
  - a. Students will be able to offer at least one fact about that important figure in science.
  - b. Students will be able to write about an important figure in science.
2. Lesson Content
  - a. Review of information shared by class "visitor" during previous lesson.
3. Skill Objectives
  - a. Students will write sentences about "visitor" using capitalization for the first word of a sentence, for names of people, and for the pronoun I.
  - b. Students will locate on a map the "visitor's" homeland.

- B. *Materials*
1. Map or globe
  2. Science center display
  3. Science journals
  4. Chart paper and markers
- C. *Key Vocabulary*
1. (See **Lesson One**)
- D. *Procedures/Activities*
1. Conduct a review discussion of the previous “visit” to the classroom by Rachel Carson. Encourage students to share everything they remember about the visit and the information shared. If this discussion can be held near the science center display, the sight of display items may help to generate more discussion from the students. List information offered by the students on the chart paper under the heading “Rachel Carson”.
  2. Talk to students about writing about the things they learned using complete sentences. Demonstrate, using the information shared on the chart page, how to write a complete sentence using a capital letter at the beginning of the sentence, for names of people and for the pronoun “I”. Leave example on the board or chart paper for students to use as a model.
  3. Model writing complete sentences a number of times having children offer sentences they can make from information shared. Write examples on chart paper or blackboard.
  4. Have students return to desks and complete sentence writing activity in science journals giving the following instructions: “Write at least two complete sentences in your journals about the important things Rachel Carson did.”
- Science Center Extensions:
1. Add an activity to the center using a pocket chart and sentence strips. Write a sentence on each sentence strip about Rachel Carson. Cut the strips apart by words and punctuation. Have students put the words and punctuation in the proper order in the pocket chart to build a proper sentence. When writing on the sentence strips, use a different color marker to emphasize capital letters and end punctuation to draw attention to those parts.
- E. *Assessment/Evaluation*
1. Teacher will collect science journals to assess how well students understand the process of writing a complete sentence with capital letters and end punctuation placed properly.
  2. Teacher will observe pocket chart activity to assess how well students place words and punctuation in proper order to form sentences.

### **Lesson Three: Louis Pasteur**

- A. *Daily Objectives*
1. Concept Objectives
    - a. Students will be able to recognize the name Louis Pasteur.
    - b. Students will be able to state one fact about Louis Pasteur.
    - c. Students will be able to state what important contribution Louis Pasteur made to society.
  2. Lesson Content
    - a. Louis Pasteur will “visit” the classroom and talk to the students about his life, his interests and his contributions to society.
  3. Skill Objectives
    - a. Students will listen to the presentation and interact with the “visitor”.
    - b. Students will produce a journal entry about the “visitor” for the day with spelling sufficient to be able to read the words himself or herself.

- B. *Materials*
- empty milk cartons, microscope and slides, child's chemistry set, milk can from a dairy farm (if you can get it)
  - pictures of Louis Pasteur
  - clothing that could have been worn by a man living in the 1830's or 40's in France
  - Pictures of French landmarks such as the Eiffel Tower or Arch du Triumphe
- C. *Key Vocabulary*
- germs – a microorganism causing disease
  - vaccination – an injection given to produce an immunity to a disease
  - experiment – a procedure carried out to test a hypothesis
  - hypothesis – an assumption that needs to be tested with an experiment
  - scientist – a person learned in science
  - pasteurization – the act of heating a liquid or other food for a period of time that kills objectionable organisms without damage to the liquid or food product.
- D. *Procedures/Activity*
- Follow same procedure as in steps 1-3 in **Lesson One** however have conversation apply to a “visit” from Louis Pasteur.
- Science Center Extensions:
- A display can be arranged to show landmark items from France and other items Pasteur may have used during his work (microscope, slides, etc.) An empty milk carton with the word “pasteurized” highlighted should be displayed so children can see how Pasteur's work continues to be with us today.
- E. *Assessment/Evaluation*
- Teacher will collect science journals and assess how well the children understood the information presented about the importance of Louis Pasteur's discoveries and work.
  - Teacher observation of student participation in class discussion.

#### **Lesson Four: Louis Pasteur**

- A. *Daily Objectives*
- Concept Objectives
    - Students will be able to offer at least one fact about Louis Pasteur.
    - Students will be able to write about Louis Pasteur.
  - Lesson Content
    - Review of information shared in class by the “visitor” during previous lesson.
  - Skill Objectives
    - Students will write sentences about “visitor” using capitalization for the first word of a sentence, for names of people, and for the pronoun I.
    - Students will locate on a map or globe the “ visitor's” homeland.
- B. *Materials*
- Map or globe
  - Science center display
  - Science journals
  - Chart paper and markers
- C. *Key Vocabulary*
- (See **Lesson Three**)
- D. *Procedures/Activities*
- Conduct a review discussion of the previous “visit” to the classroom by Louis Pasteur. Have students compare this “visit” with that of Rachel Carson. Encourage students to share everything they can remember about the visits and the information shared. If this discussion can be held near the science center displays, the sight of the display items may help to generate more discussion from the students. List information offered by the

students on the chart paper under the heading “Louis Pasteur”. Make a new chart with two columns, one for Rachel Carson and one for Louis Pasteur. Have the students offer ideas of things to list about each person and place them in the appropriate columns. Talk about likenesses and differences of these two people.

2. Review the discussion about writing complete sentences. Give models, using information shared during the discussion, of complete sentences written with correct capitalization and end punctuation.
3. Have students return to desks to write in science journals about Louis Pasteur, reminding them to write complete sentences as was modeled on the board.

Science Center Extensions:

1. For those students still having difficulty with capitalization and end punctuation, the same pocket chart activity used in **Lesson Two** can be adapted for this lesson using sentence strips that refer to Louis Pasteur.

E. *Assessment/Evaluation*

1. Teacher will collect science journals to assess how well students understand the process of writing a complete sentence with capital letters and end punctuation place properly.
2. Teacher will observe pocket chart activity to assess how well students place words and punctuation in proper order to form sentences.

**Lesson Five: Thomas Edison**

A. *Daily Objectives*

1. Concept Objectives
  - a. Students will be able to recognize the name Thomas Edison.
  - b. Students will be able to state one fact about Thomas Edison.
  - c. Students will be able to state what important contribution Thomas Edison made to society.
2. Lesson Content
  - a. Thomas Edison will “visit” the classroom and talk to the students about his life, his interests and his contributions to society.
3. Skill Objectives
  - a. Students will listen to the presentation and interact with the “visitor”.
  - b. Students will produce a journal entry about the “visitor” for the day with spelling sufficient to be able to read the words himself or herself.

B. *Materials*

1. Books about Thomas Edison, including *The Power of Being Creative Featuring the story of Thomas Edison* by Patricia Metten.
2. Light bulbs, wire, battery (D size), pictures of Thomas Edison
3. Clothing that would be worn by a man of the 1860’s in the north eastern area of the United States.

C. *Key Vocabulary*

1. electricity – electric current or power
2. inventor – a person who makes something for the first time
3. light bulb – an electric light in which a filament gives off light when heated by an electric current

D. *Procedures/Activities*

1. (Same as **Lesson One**)

Science Center Extensions

1. Arrange a display of items or pictures of items invented by Thomas Edison: light bulb, phonograph, wireless telegraph
2. Children should write a sentence or draw a picture about one thing they remember about Thomas Edison.

- E. *Assessment/Evaluation*
1. Teacher will collect science journals and assess how well the children understood the information presented about the importance of Thomas Edison's contributions.
  2. Teacher observation of student participation in class discussion.

### **Lesson Six: Thomas Edison**

A. *Daily Objectives*

1. Concept Objectives
  - a. Students will be able to offer at least one fact about Thomas Edison.
  - b. Students will be able to write about Thomas Edison.
2. Lesson Content
  - a. Review information shared by class "visitor" during previous lesson.
3. Skill Objectives
  - a. Students will write sentences about Thomas Edison using capitalization for the first word of a sentence, for names of people, and for the pronoun I.
  - b. Students will locate on a map Thomas Edison's home.

B. *Materials*

1. Map or globe
2. Science center display
3. Science journals
4. Chart paper and markers

C. *Key Vocabulary*

1. (See **Lesson Five**)

D. *Procedures/Activities*

1. Conduct a review discussion of the previous visit to the classroom by Thomas Edison. Have the students talk about everything they remember about his "visit". Write the name "Thomas Edison" on a piece of chart paper. List all the things the students share about him on the paper. Use the items in the Edison science center to generate discussion.
2. Model writing sentences about Thomas Edison using information from the chart. Have students offer a few sentences they make from the chart information.
3. Have students return to desks and complete sentence writing activity in science journals. Remind them of proper capitalization and end punctuation.

Science Center Extension:

1. (See extensions for **Lesson Four**, however, make the sentence strip information apply to Thomas Edison.)

E. *Assessment/Evaluation*

1. Teacher will collect science journals to assess how well students understand the process of writing a complete sentence with capital letters and end punctuation placed properly.
2. Teacher will observe pocket chart activity to assess how well students place words and punctuation in proper order to form sentences.

## **VI. CULMINATING ACTIVITIES**

- A. Have students meet as a group on the floor in front of the science center displays about the three special "visitors". On a piece of chart paper make three columns and write the names Rachel Carson, Louis Pasteur, and Thomas Edison at the top of each column. Talk about the differences between Rachel Carson, Louis Pasteur and Thomas Edison as well as how they are alike. Have students look at the different science center displays about each of the visitors and talk about their contributions. Have them verbalize about the importance of the contributions of each person. As the students share, write their responses under the appropriate column on the chart paper.

- B. Model writing sentences about the three special “visitors” using information from the chart. Have the students offer sentences they make from the information from the chart.
- C. Have students go back to their desks and write about the visits from the special visitors and what was learned from the visits on large sheets of lined paper. Students should write at least one sentence about each person and one sentence about how they all were alike. Students are encouraged to illustrate their writing.
- D. Students share their writing with the class.

## VII. HANDOUTS/WORKSHEETS

Appendices A-C

## VIII. BIBLIOGRAPHY

- A. Beals, G. “Thomas Edison ‘Quotes’ [On-line]. Available URL: <http://www.thomasedison.com/edquote.htm>, 1996
- B. Beals, G. “Major Inventions and Events in the life of Thomas Alva Edison” [On-line]. Available URL: <http://www.thomasedison.com/Inventions.htm>, 1996
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Appendix A  
Worksheet

# Louis Pasteur “Got Milk?”

Name \_\_\_\_\_

Date \_\_\_\_\_

**WORD BANK**

milk

can

farm

vaccination

chemistry

French

germs

**Unscramble the letters below to make words we know.**

limk \_\_\_\_\_

nca \_\_\_\_\_

mfra \_\_\_\_\_

mgers \_\_\_\_\_

ccnnvaiatoni \_\_\_\_\_

ycemhsitr \_\_\_\_\_

ceFhrn \_\_\_\_\_

# Rachel Carson – “Let’s Keep our Environment Clean”

Name \_\_\_\_\_

Date \_\_\_\_\_

## WORD BANK

pollution      litter      environment

chemical      nature

Fill in the blanks in each sentence with the correct word.

1. Rachel Carson was sad because people throw

\_\_\_\_\_ in our oceans.

2. We should respect \_\_\_\_\_ so that

it can be enjoyed forever.

3. Our \_\_\_\_\_ is everything

around us.

4. \_\_\_\_\_ in the water is

dangerous for animals and humans.

5. A \_\_\_\_\_ is something that can come from a factory and get in the water that pollutes it.

Draw a picture below to show how you can help keep our environment clean.

Appendix C  
Worksheet

## Thomas Edison – “Turn the Light On!”

Name \_\_\_\_\_

Date \_\_\_\_\_

Help Thomas Edison “turn the light on” by writing a sentence for each of the words below.

1. electricity -

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2. inventor - \_\_\_\_\_

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3. light bulb - \_\_\_\_\_

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Draw a picture below to show why you think Thomas Edison is an important person.