



Pre-Visit Activity Packet

Building an Estate



Building an Estate

Vocabulary Words

- **Blueprint-**

A photographic print in white on a bright blue ground or blue on a white ground is used especially for copying maps, mechanical drawings, and architects' plans; Serves as a model or provides guidance.

- **Floor plan-**

A scale diagram of a room or suite of rooms viewed from above and used especially for planning effective use and arrangement of furnishings.

- **Perimeter-**

The boundary of a closed plane figure.

- **Area-**

The surface included within a set of lines.

- **Scale-**

An indication of the relationship between distances and the corresponding actual distances.

- **Architecture/ Architect-**

The art or practice of designing and building structures; A person who designs buildings and advises in their construction.

- **Arts and Crafts Movement-**

A movement in European and American design during the late 19th and early 20th centuries promoting handcraftsmanship over industrial mass production.

- **Lucknow-**

16-room Arts & Crafts style mansion built as a retirement estate for Tom & Olive Plant in 1914 in the Ossipee Mountains, now known as Castle in the Clouds.



Building an Estate

Tic-Tac-Toe

MATERIALS:

- Vocabulary Word Cards
- Game Board

DESCRIPTION:

To play, students will play regular tic-tac-toe by placing down one of the vocabulary cards onto the spot they claim. BUT instead of moving on, they have to spot and define the word. If defined correctly, then they can draw their X or their O on top of the card to claim it and that spot.

Name: _____

Date: _____



Building an Estate

TIC-TAC-TOE

VOCABULARY WORD CARDS

Directions: Print and cut out the vocabulary word cards to define during the tic-tac-toe game.

Lucknow	Area	Architect
Blueprint	Floor plan	Arts and Crafts Movement
Scale	Architecture	Perimeter

Name: _____

Date: _____



Building an Estate

TIC-TAC-TOE

Directions: Place the vocabulary card in the space you choose to claim. Before switching turns you must define the vocabulary word correctly, followed by drawing an X or O on that space.



Building an Estate

My Dream Bedroom

MATERIALS:

- (2) Differentiated Writing Prompts
 - *Option #1:* Upper Elementary & Lower Middle School (p.1)
 - *Option #2:* Lower Elementary (p.3)
- Drawing Template accompanying option #1 (p.2)

DESCRIPTION:

This activity offers a way for students to explore the world of architecture and create floor plans while practicing the life skills of self-recognition and personal interests. As the students complete their dream bedroom activity, the teacher will rotate around the room to facilitate students while they work.

Name: _____

Date: _____



Building an Estate

If you could build your dream bedroom, what would it have in it? How would it be set up? Write a story about your dream bedroom. Use detail to explain why you would have the items you dream about in it and why it would be set up the way you imagine it to be!

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Name: _____

Date: _____



Building an Estate

Directions: In the space below create a floor plan of your dream bedroom described in your story. Once you have drawn your dream bedroom, you may use coloring supplies to add detail and bring your dream to life!

Name: _____

Date: _____



Building an Estate

In the space below, draw a picture of your dream bedroom. Then, use detail to write a short story explaining your drawing



Building an Estate

Fill in the Blank Worksheet

MATERIALS:

- Answer Key
- Fill in the Blank Worksheet

DESCRIPTION:

Students complete the attached worksheet using the vocabulary words in the word bank. Students may benefit from using the vocabulary definition handout (page 1 of this packet) for differentiated instruction.

Name: _____

Date: _____



Building an Estate

ANSWER KEY

blueprint	lucknow	scale	perimeter
area	floor plan	architect	arts and crafts movement

1. A **perimeter** is the boundary or outline of a shape.
2. A system used for to indicate distances relative to the actual size is a **scale**.
3. Creating mechanical drawings is possible due to the use of **blueprints**.
4. An **architect** advises in the construction of the designs they create.
5. **Floor plans** utilize scales for the purpose of creating an effective layout.
6. During the late 19th and early 20th centuries, the **arts and crafts movement** promoted hand craftsmanship over industrial mass production.
7. In 1914, **Lucknow** was built as a retirement estate for Tom and Olive Plant.
8. The surface within a set of lines is the **area** of an object, place, or thing.

Name: _____

Date: _____



Building an Estate

Directions: Use the vocabulary words from the word bank to complete each sentence by filling in the blanks.

blueprint	lucknow	scale	perimeter
area	floor plan	architect	arts and crafts movement

1. A _____ is the boundary or outline of a shape.
2. A system used for to indicate distances relative to the actual size is a _____.
3. Creating mechanical drawings is possible due to the use of _____.
4. An _____ advises in the construction of the designs they create.
5. _____ utilize scales for the purpose of creating an effective layout.
6. During the late 19th and early 20th centuries, the _____ promoted hand craftsmanship over industrial mass production.
7. In 1914, _____ was built as a retirement estate for Tom and Olive Plant.
8. The surface within a set of lines is the _____ of an object, place, or thing.



Post-Visit Activity

Building an Estate



Building an Estate

Design the Classroom!

MATERIALS:

- Formula Guide (p.1)
- Graph Paper *not provided in this post-visit packet*
- Pencils
- Recording Sheets:
 - Measurement Recording Sheet (p.3)
 - Area and Perimeter Calculation Sheet (p.4)
- Ruler/tape measures
- Reflection (p.6)

DESCRIPTION:

Students will work in groups to create a blueprint of their classroom using measurements. They then create their floor plan for the classroom using the measurements previously recorded.

- If the teacher decides, a fun way to practice what it means to be a contributing group member and work with a team would be to discuss jobs each child could do (measure, record measurements, sketch outlines on the blueprint, etc) and have students pick who will do what job.



Building an Estate Formula Guide

AREA:

- Rectangle = $a \times b$
- Square = a^2
- Triangle = $\frac{1}{2} b \times h$; where b is the base and h is the height of the triangle.
- Parallelogram = $b \times h$
- Circle = $\pi \times r^2$

PERIMETER:

- Rectangle = $2(a+b)$
- Square = $4a$
- Triangle = $a + b + c$, where a , b , and c are the three different sides of the triangle.
- Parallelogram = $2(a+b)$
- **(Circumference):** Circle = $2\pi r$

Name: _____

Date: _____



Building an Estate

Part 1

- **Materials:**

- Tape Measures (You may also want to use a ruler, compass, and protractor)
- Recording sheet to record measurements and calculations
- Graph Paper
- Pencil(s)

- **Directions:**

- With your group, begin by using a tape measure or ruler to measure and record the room's dimensions and furniture. It may help to make a rough sketch of the room and to write your measurements next to the corresponding wall, furniture, floor, etc.
- Using the measurements you have recorded, determine the area and perimeter of our room and each piece of furniture.
- Then, convert your measurements to create a scale that can be represented on graph paper.

Name: _____

Date: _____



Building an Estate

Measurement Recording Sheet

Directions: As you measure the items that make up your classroom, write the dimensions in the spaces below for later use when calculating the area and perimeter.

ITEM NAME: _____	ITEM NAME: _____	ITEM NAME: _____
ITEM NAME: _____	ITEM NAME: _____	ITEM NAME: _____
ITEM NAME: _____	ITEM NAME: _____	ITEM NAME: _____
ITEM NAME: _____	ITEM NAME: _____	ITEM NAME: _____

Name: _____

Date: _____



Building an Estate

Area and Perimeter Calculation Sheet

Directions: Using the formula guide on page 1 if needed, calculate the area and perimeter of the items recorded on page 2.

ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>	ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>	ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>
ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>	ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>	ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>
ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>	ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>	ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>
ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>	ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>	ITEM NAME: _____ <u>Perimeter:</u> <u>Area:</u>

Name: _____

Date: _____



Building an Estate

Part 2

- **Materials:**

- Measurements and Calculations from Part 1.
- Graph Paper (for drawing your blueprint)
- Pencil(s)

- **Directions:**

- With your group, create the blueprint. Consider how your design can boost productivity and focus in our classroom.

- **Make sure to:**

- Include a title at the top of your blueprint
- Clearly label your blueprint
- Include a scale
- Write your names on the back of the blueprint

Name: _____

Date: _____



Building an Estate

Part 3

- **Directions:**

- This part of the project is to be done individually. Justify your design.
 - Why did you design it the way that you did? Tell me how your design will help you and your classmates learn better. Use this sheet to write your draft.

- **Your writing should include the following items:**

- The purpose of the activity
- Who created the blueprint
- What challenges did you face throughout this project
- Why you design the room the way you did

Name: _____

Date: _____

[illegible]