

COURTYARD

Project Manual

2019 - 2020

Name:

Homeroom:

Team Name:

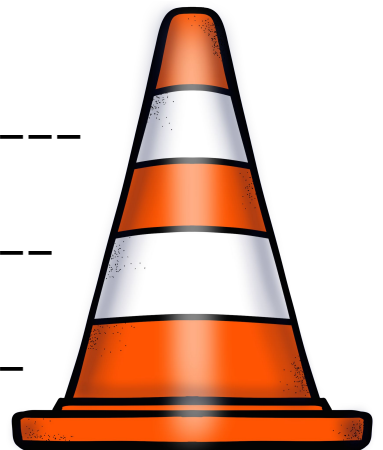
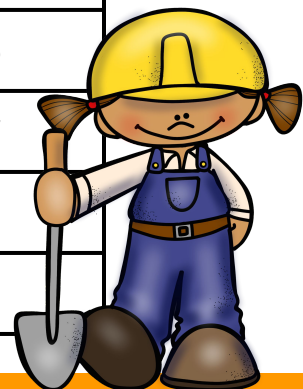


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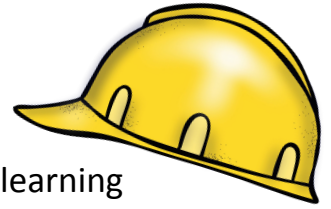
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Project Introduction



Welcome!



This year 5th grade will be participating in a project-based learning experience geared towards the career pathway of construction. Your job will be to work with a team to generate/create and determine a solution for this year's driving question. The experience will provide you with challenges, the opportunity to grow as a team, real-life career based experiences, and much more! Put on your hard hats, because we're about to...

DIG IN!

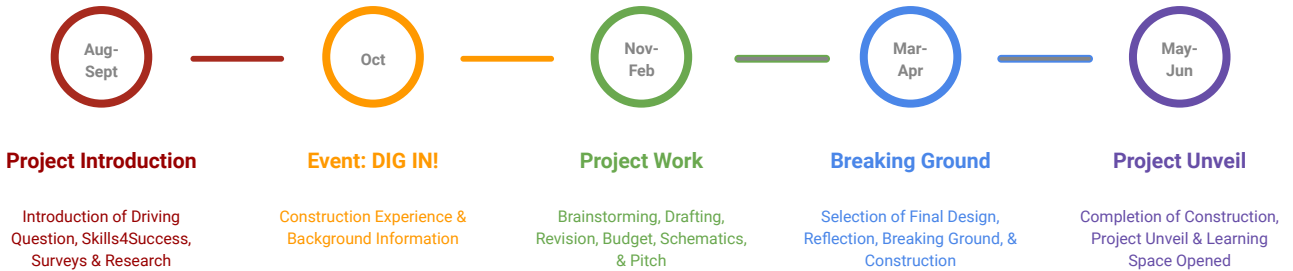
Driving Question

How can we redesign the two courtyard spaces at Hamilton Middle School to be **creative** and intentional outdoor learning spaces?





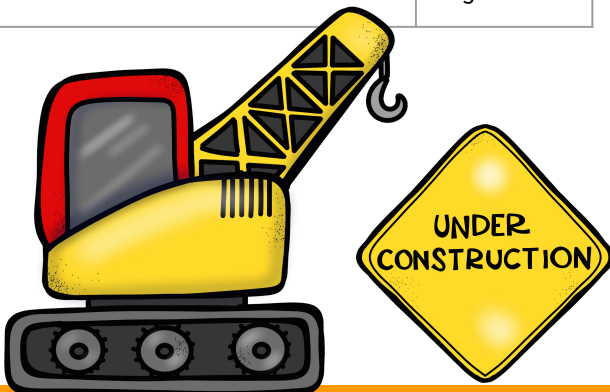
Yearlong Project Breakdown



Project by Month

August - September	
Project Introduction/Driving Question	Page 4
Skills4Success	Page 6
Sketch the Space	Pages 9-12
Project Research	Pages 13-16
October	
DIG IN! Event	Pages 17-32

November - February	
Brainstorming	Page 33
Drafting	Pages 34-35
Budget	Page 36
Design Schematics	Page 37
Pitch	Page 38
March - April	
Reflection	Page 39
Breaking Ground	N/A
May - June	
Project Unveiling	N/A

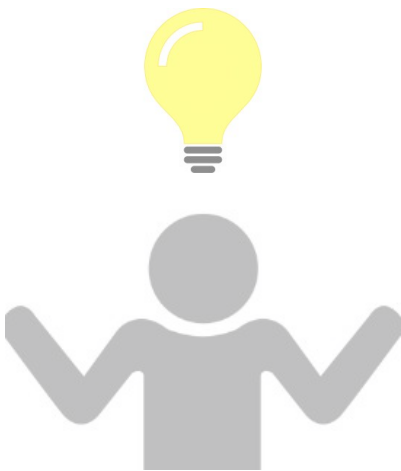


What is PBL?



Think

What do you think PBL is? What does it look like, sound like, feel like, etc.?



Wonder

What do you wonder about PBL? What questions do you have about PBL?



Know

What is PBL? How will PBL be a part of your learning journey this year?



Creative Sequence Personality Quiz

ORANGE	GREEN	PURPLE	BLUE	RED	YELLOW



Skill Presentation

Skill: _____ Presenter: _____

My Notes: _____



Skills4Success Defined

Skills4Success have identified by businesses, colleges, and schools as skills that are important for students to build in order to thrive in the world today.

Technology Literacy

Communication

Ethical Citizenship

Critical Thinking &
Problem Solving

Collaboration

Personal Accountability

Flexibility & Adaptability



Project Norms



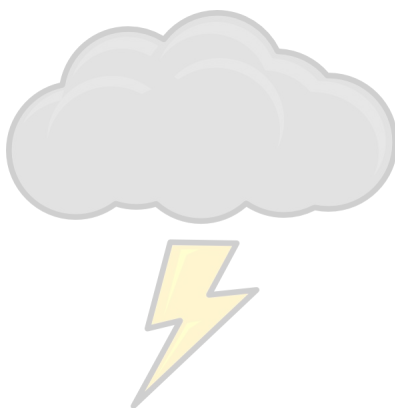
Hopes

If this were the **BEST** experience ever, what would it look like, sound like, feel like, etc.?



Fears

If this were the **WORST** experience ever, what would it look like, sound like, feel like, etc.?



Norms

What **NORMS** or agreements should we have to realize our hopes and negate our fears?



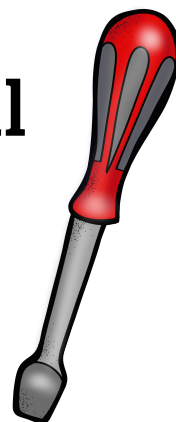
Social Contract

Responsible

Respectful

Safe

Engaged



Collaboration Norms



7 Norms of Collaboration

Paraphrasing



Pausing



Questions



Give Ideas



Pay Attention



Get Specific



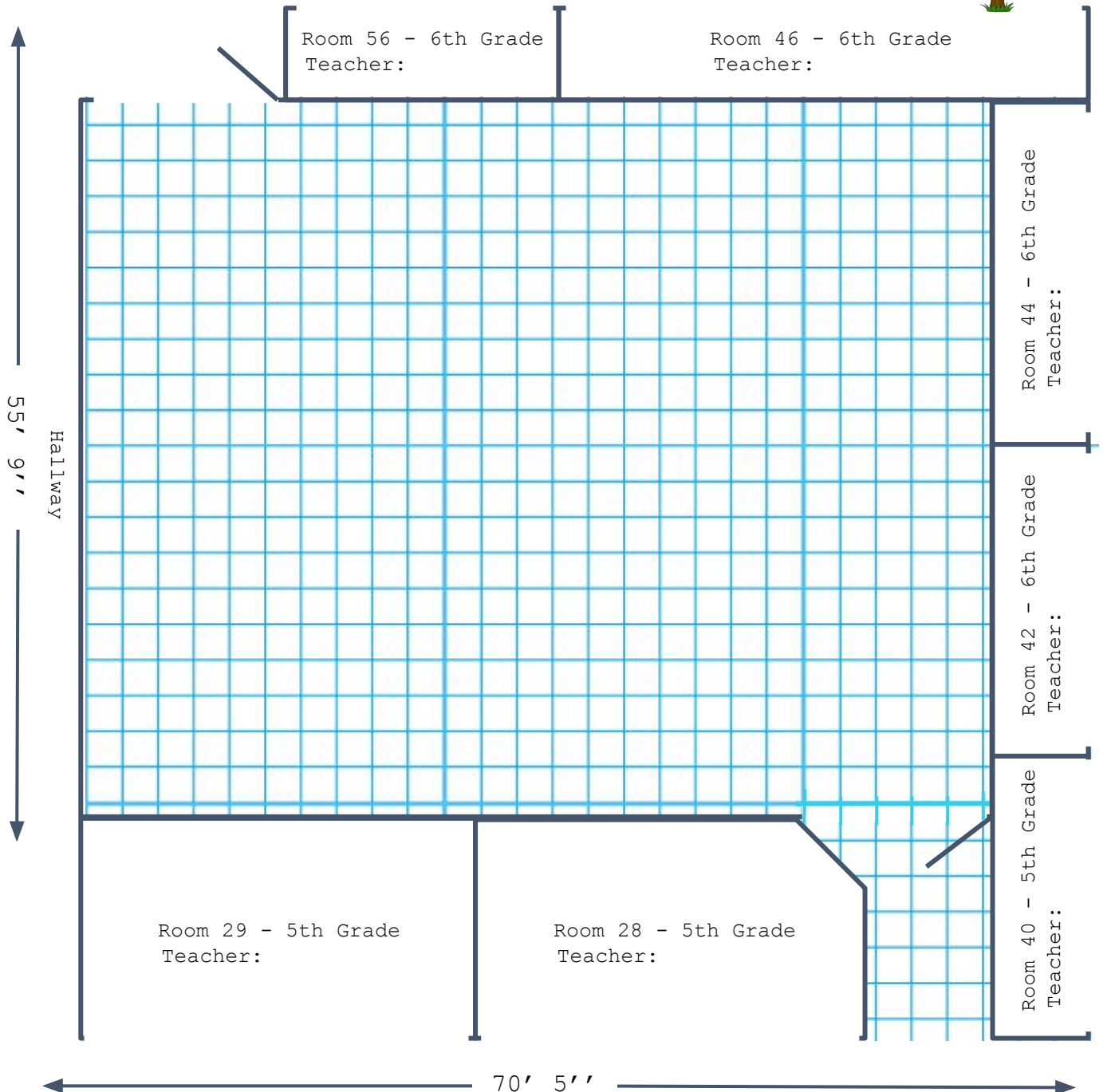
Think Positive



Sketch the Space



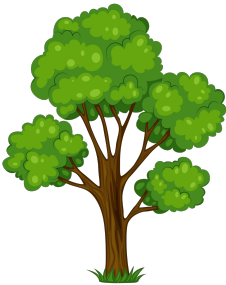
West Courtyard

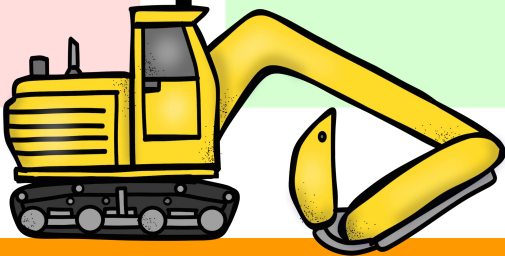


Gaining Empathy



West Courtyard **PAINS** & **GAINS**

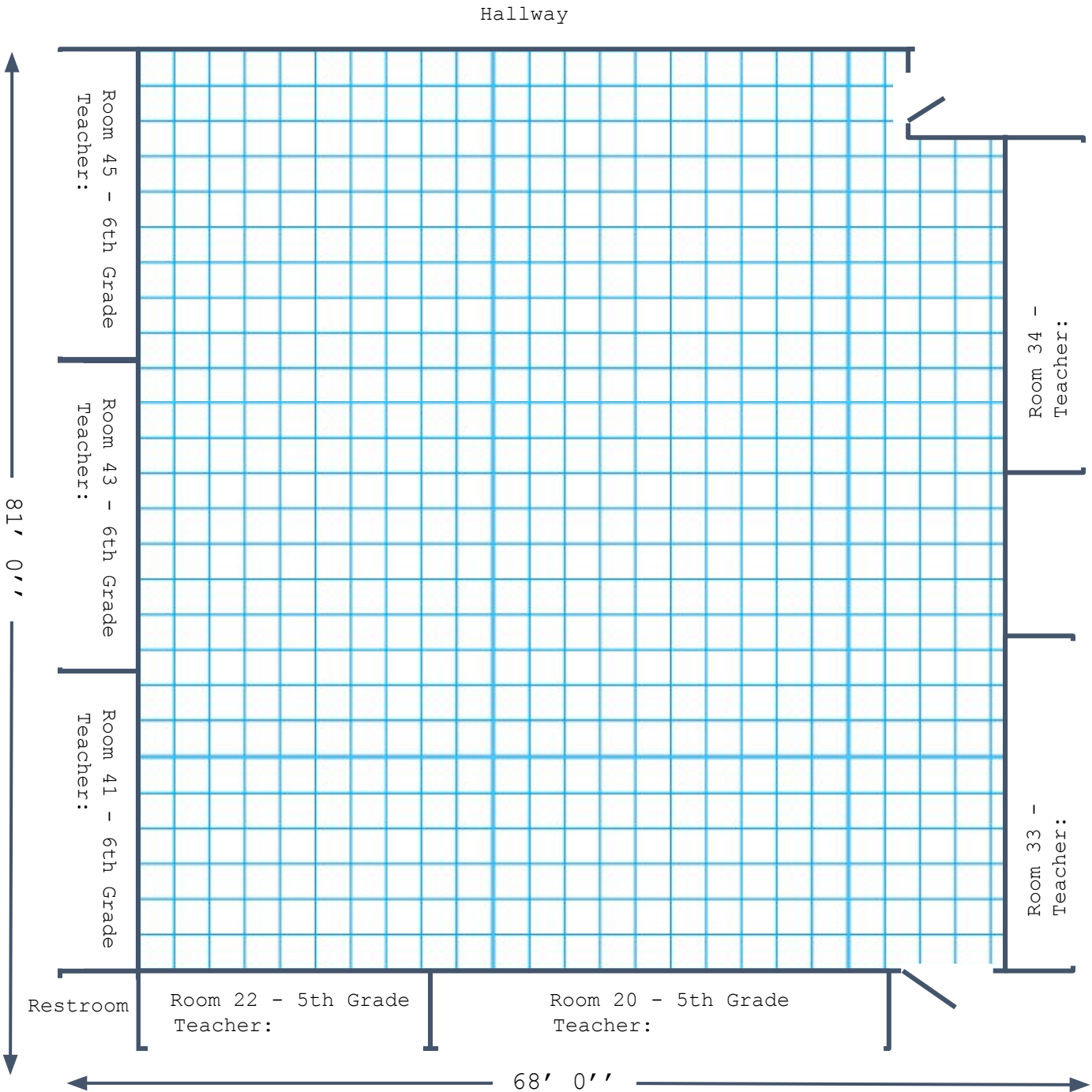
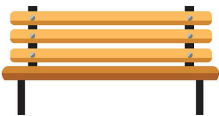




Sketch the Space

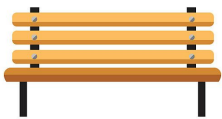


East Courtyard





East Courtyard Empathy Map



Who will be impacted by the courtyard?

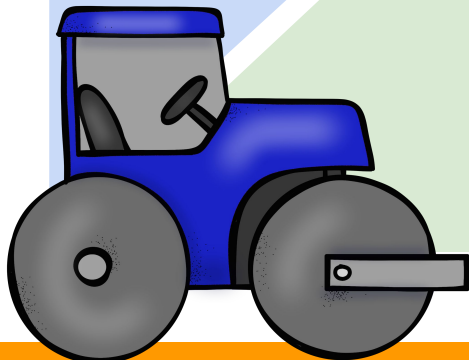
Feeling

Thinking

Doing

Seeing

Saying



Survey Results



Teacher Survey Data Analysis

Question #1:

I teach...

What fraction of participants are teaching each grade?

5th Grade _____ 7th Grade _____

6th Grade _____ 8th Grade _____

More than one grade _____

List the fractions in order from least to greatest.

_____, _____, _____, _____, _____



Question #2:

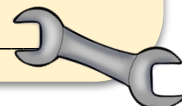
Subjects

What fraction of participants are teaching each core subject?

ELA _____ Science _____

Math _____ Social Studies _____

What fraction of participants are teaching electives? (Art, Vocal, Band, Physical Education, Computers)



Question #3:

Current Use

What fraction of participants use the courtyard for each frequency category?

Daily _____ Semester _____

Weekly _____ Yearly _____

Monthly _____ Never _____

Which frequency category is the greatest? Which is the least? What is the difference?

Greatest _____ Least _____ Difference _____



Question #4:

Potential Use

What fraction of participants would like use the courtyard for each activity type?

Whole Group _____ Individual _____

Small Group _____ Stations _____

Partner Work _____ Presentation _____

Investigations _____ Other _____

List the fractions in order from greatest to least.

_____, _____, _____, _____, _____, _____, _____

Question #5:

Features

Which three outdoor features were the most popular? Which three outdoor features were the least popular?

Most Popular _____

Least Popular _____

What fraction of votes did the three most popular features receive? What fraction did the three least receive? What is the difference?

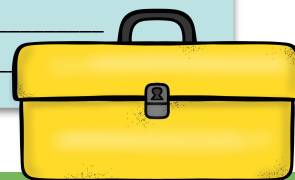
Most Popular _____ Least Popular _____ Difference _____

Question #6:

Concerns

Which was the greatest concern voted for by participants? Why do you think this is?

Which was the concern least voted for by participants? Why do you think this is?



Survey Results



Student Survey Data Analysis

Question #1:

I teach...

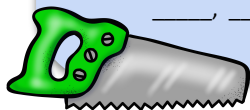
What fraction of participants in each grade level?

5th Grade _____ 7th Grade _____

6th Grade _____ 8th Grade _____

List the fractions in order from least to greatest.

_____, _____, _____, _____, _____



Question #2:

Subjects

What fraction of participants selected each subject as their favorite?

ELA _____ Science _____

Math _____ Social Studies _____

Art _____ Vocal _____ Band _____

P.E. _____ Computers _____ Other _____



Question #3:

Current Use

What fraction of participants would like to learn outside for each time category?

Daily _____ Semester _____

Weekly _____ Yearly _____

Monthly _____ Never _____

Which time category is the greatest?
Which is the least? What is the difference?

Greatest _____ Least _____ Difference _____



Question #4:

Potential Use

What fraction of participants would like use the courtyard for each activity type?

Whole Group _____ Individual _____

Small Group _____ Stations _____

Partner Work _____ Presentation _____

Investigations _____ Other _____

List the fractions in order from greatest to least.

_____, _____, _____, _____, _____, _____, _____

Question #5:

Features

Which three outdoor features were the most popular?
Which three outdoor features were the least popular?

Most Popular _____

Least Popular _____

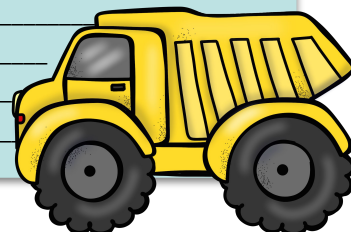
What fraction of votes did the three most popular features receive? What fraction did the three least receive? What is the difference?

Most Popular _____ Least Popular _____ Difference _____

Question #6:

Reflection

What do you think students would appreciate in the courtyards? Why?



Survey Results



Data Analysis Reflection

How can teacher concerns about the courtyards be fixed?

How often do students want to learn outside?

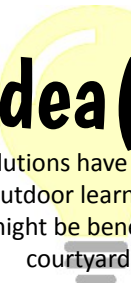
What did you find most interesting about the surveys?

What activities could take place in the courtyards?

What outdoor features might you want to include? Why?

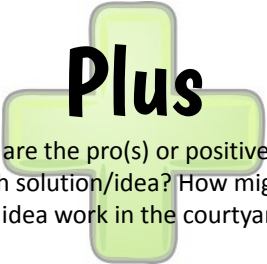


Background Research



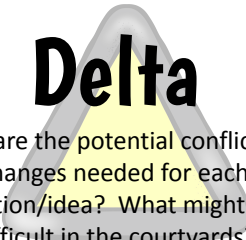
Idea(s)

What solutions have been used in other outdoor learning spaces?
What might be beneficial in the courtyards?



Plus

What are the pro(s) or positives for each solution/idea? How might each idea work in the courtyards?



Delta

What are the potential conflicts or changes needed for each solution/idea? What might be difficult in the courtyards?



Administration/HR/Finance

Administration oversees business operations. Human Resources handles employee needs, concerns, or issues. Finance handles monetary needs.



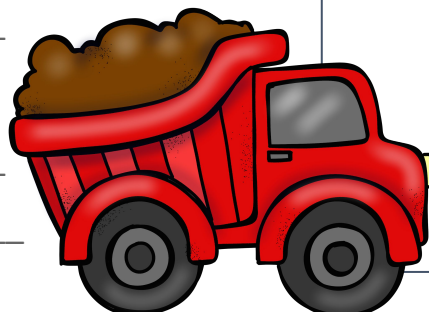
All About the Professional

Professional's Name:	
Company's Name:	
My Interest Level:	☆☆☆☆☆

The Professional and The Courtyard

How can the professional help?





Skills4Success



☐	Technology Literacy
☐	Collaboration & Global Literacy
☐	Communication
☐	Critical Thinking & Problem Solving
☐	Flexibility & Adaptability
☐	Ethical Citizenship
☐	Personal Accountability

My Favorite Part:





Architect

Plans, designs, and reviews the construction of buildings.

All About the Professional

Professional's
Name:

Company's
Name:

My Interest
Level:



Skills4Success



Technology Literacy



Collaboration & Global Literacy



Communication



Critical Thinking & Problem Solving



Flexibility & Adaptability



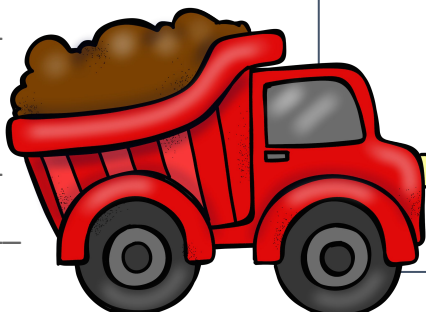
Ethical Citizenship



Personal Accountability

The Professional and The Courtyard

How can the professional help?



My Favorite Part:





Carpenter

Follow blueprints and building plans to create and install structures.
Measure, cut, or shape wood, plastic, and other materials.



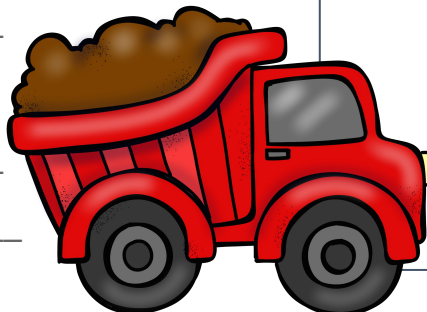
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My Favorite Part:





Concrete Finisher

Smooth and finish surfaces of poured concrete using a variety of hand and power tools. Align forms for sidewalks, curbs, gutters, etc.



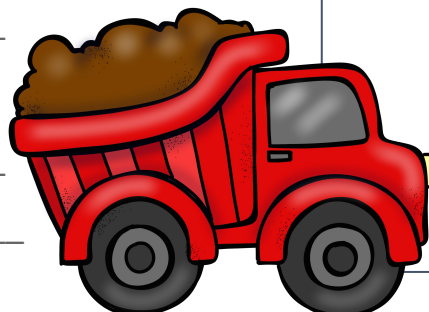
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My Favorite Part:





Construction Technology

Professionals that utilize innovative technology, machines, and software for construction, and may also make some construction processes automated.



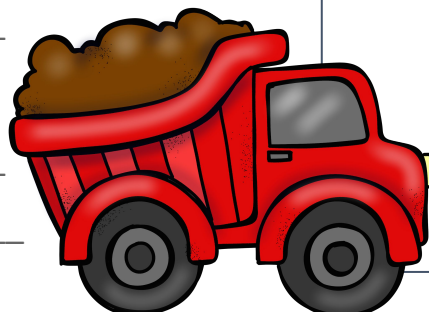
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The Professional and The Courtyard

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☐	Critical Thinking & Problem Solving
☐	Flexibility & Adaptability
☐	Ethical Citizenship
☐	Personal Accountability

My Favorite Part:





Electrician

Install and maintain wiring, control, and lighting systems. Identify electrical problems with a variety of testing devices and make repairs.



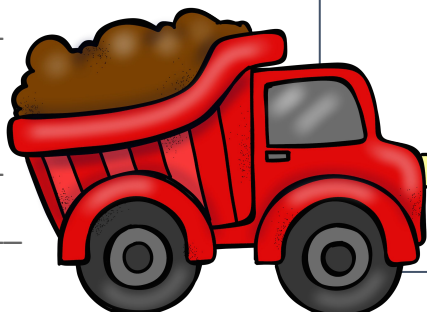
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The Professional and The Courtyard

How can the professional help?





Skills4Success



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☐	Communication
☐	Critical Thinking & Problem Solving
☐	Flexibility & Adaptability
☐	Ethical Citizenship
☐	Personal Accountability

My Favorite Part:





Estimator

Prepares work to be estimated by gathering proposals, blueprints, specification, and related documents. Identifies labor, material, and time needs.



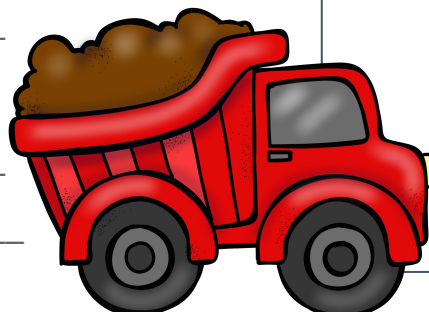
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☐	Communication
☐	Critical Thinking & Problem Solving
☐	Flexibility & Adaptability
☐	Ethical Citizenship
☐	Personal Accountability

My Favorite Part:





Finishing

Professionals who work to make the space ready to be used. Finishing includes: painting, drywalling, installing flooring, cabinets, counters, tile, etc.

All About the Professional

Professional's Name:

Company's Name:

My Interest Level:



Skills4Success



Technology Literacy



Collaboration & Global Literacy



Communication



Critical Thinking & Problem Solving



Flexibility & Adaptability



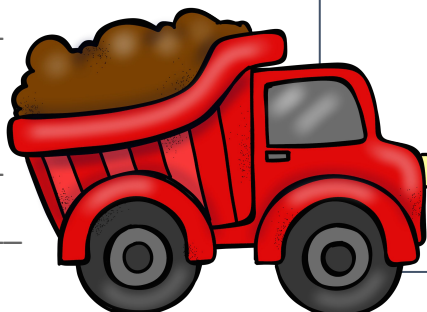
Ethical Citizenship



Personal Accountability

The Professional and The Courtyard

How can the professional help?



My Favorite Part:





General Contractor

Hires and organizes all necessary workers for a construction job.
Responsible for overseeing a project through to completion.

All About the Professional

Professional's
Name:

Company's
Name:

My Interest
Level:



Skills4Success



Technology Literacy



Collaboration & Global Literacy



Communication



Critical Thinking & Problem Solving



Flexibility & Adaptability



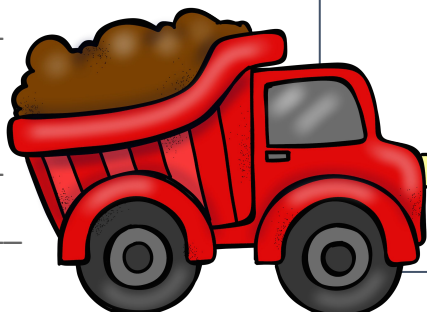
Ethical Citizenship



Personal Accountability

The Professional and The Courtyard

How can the professional help?



My Favorite Part:





Industrial Automation

The use of technology and control systems to create an automatic operation of industrial processes with superior performance without significant human intervention.



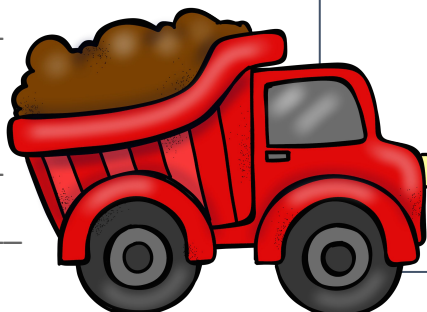
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The Professional and The Courtyard

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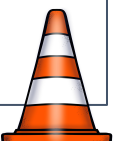


Skills4Success



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☐	Communication
☐	Critical Thinking & Problem Solving
☐	Flexibility & Adaptability
☐	Ethical Citizenship
☐	Personal Accountability

My Favorite Part:





Landscaper/Excavator

Landscapers adjust the land through planting flowers, grass, bushes, etc.
Excavator operators shape the land through grading, trenching, etc.



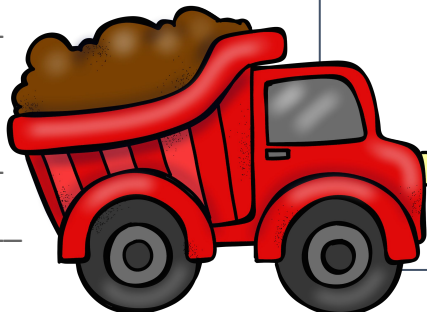
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The Professional and The Courtyard

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Skills4Success



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☐	Communication
☐	Critical Thinking & Problem Solving
☐	Flexibility & Adaptability
☐	Ethical Citizenship
☐	Personal Accountability

My Favorite Part:





Mechanical/HVAC Engineer

Design and develop mechanical components. Installs, maintains, and repairs heating, ventilation, and air conditioning systems.



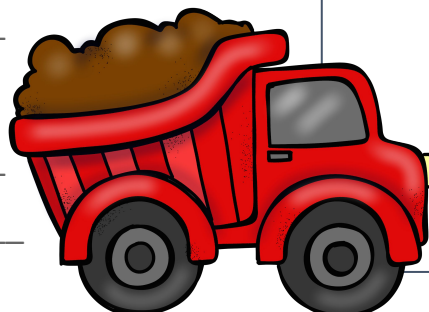
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☐	Communication
☐	Critical Thinking & Problem Solving
☐	Flexibility & Adaptability
☐	Ethical Citizenship
☐	Personal Accountability

My Favorite Part:





Plumber

Interprets blueprints and building plans to map layout for pipes, drainage systems, etc. Installs pipes and fixtures for water, gas, steam, air, etc.



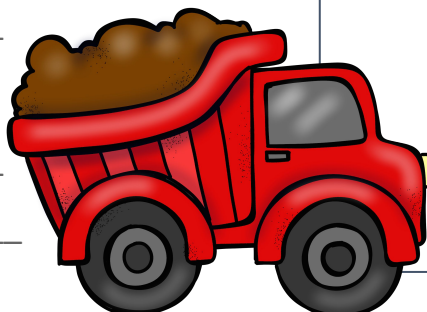
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☐	Critical Thinking & Problem Solving
☐	Flexibility & Adaptability
☐	Ethical Citizenship
☐	Personal Accountability

My Favorite Part:





Safety Coordinator

Responsible for planning, implementing, and overseeing a company's employee safety at work. Ensure the company follows requires guidelines.

All About the Professional

Professional's Name:

Company's Name:

My Interest Level:



Skills4Success



Technology Literacy



Collaboration & Global Literacy



Communication



Critical Thinking & Problem Solving



Flexibility & Adaptability



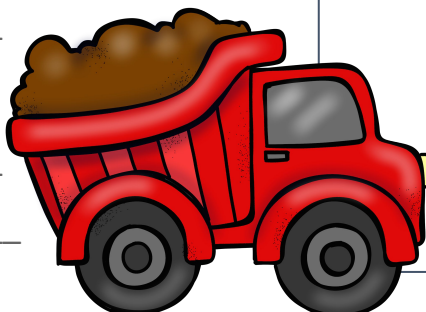
Ethical Citizenship



Personal Accountability

The Professional and The Courtyard

How can the professional help?



My Favorite Part:





Sales/Marketing

Contribute information, ideas, and research to help develop marketing strategies. Develop sales strategies and approaches for various products.



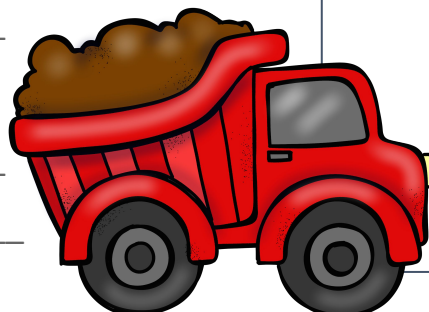
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My Favorite Part:





Team Idea Bank

- _____
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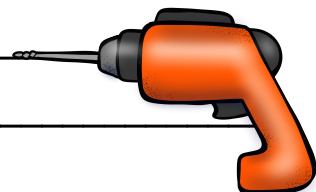
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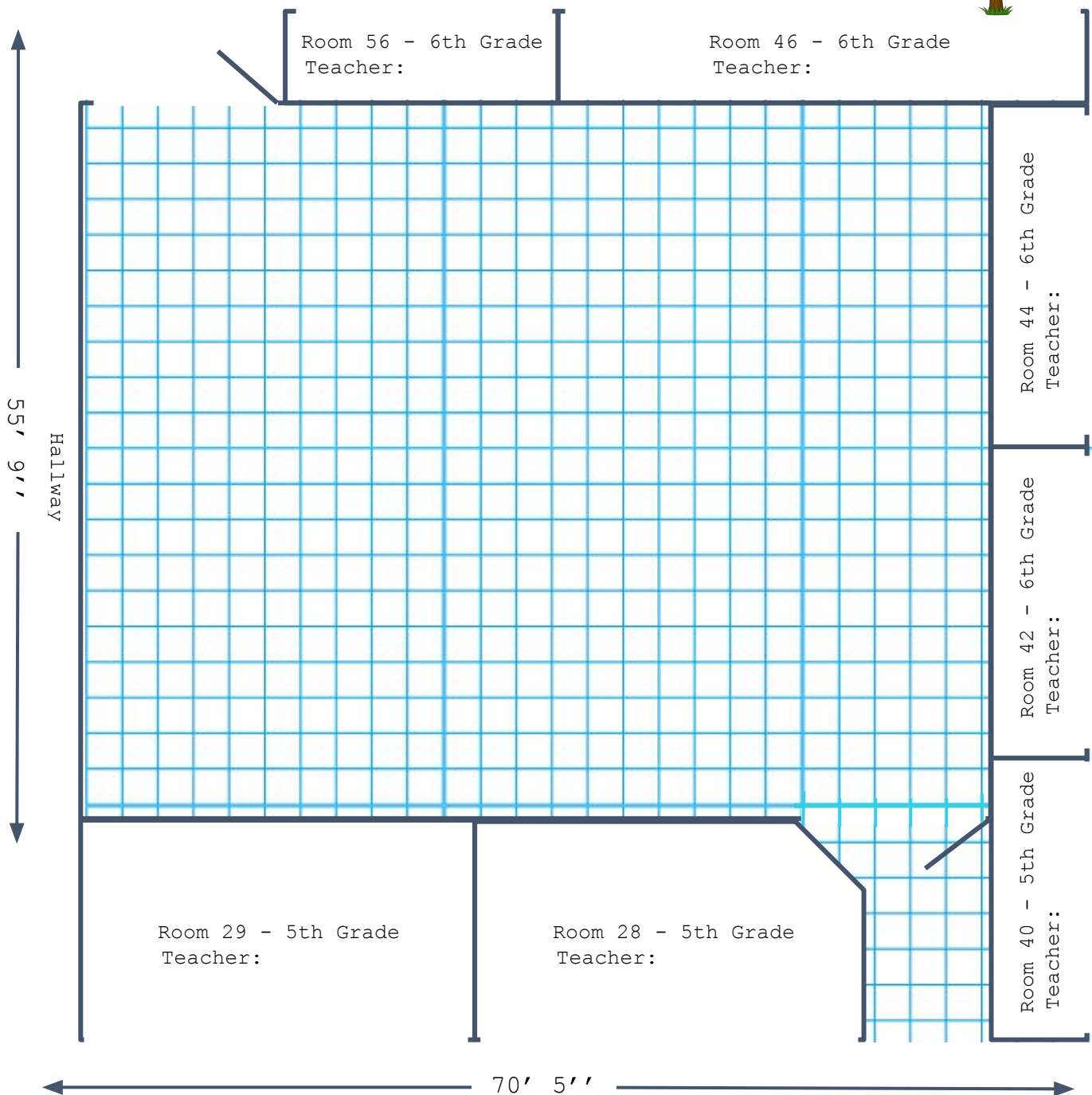
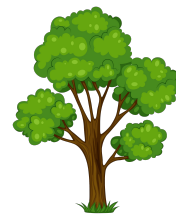
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What are your top 3 favorite ideas? Why? _____



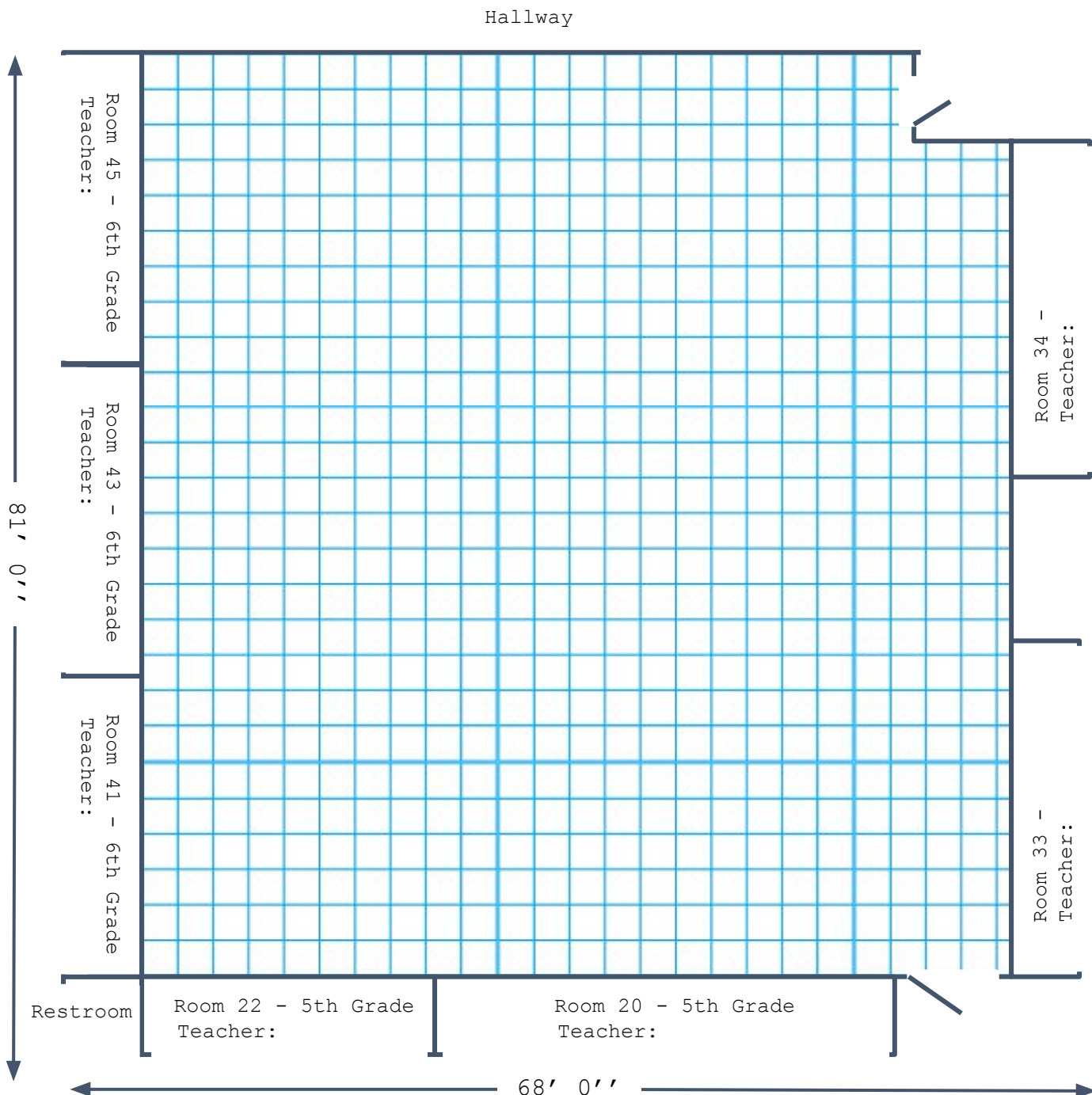


West Courtyard





East Courtyard

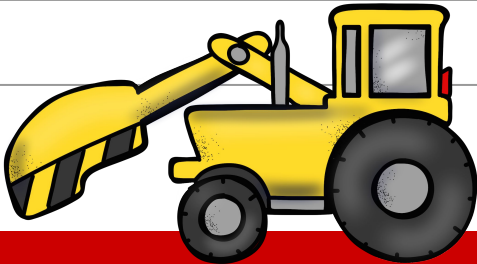


Project Budget



Courtyard Budget

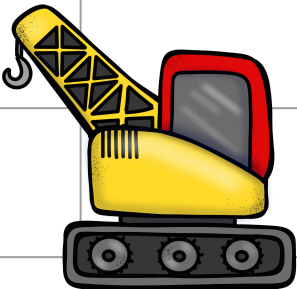
Labor	
Seating/Tables	
Learning Materials	
Landscaping (Plants & Ground Cover)	
Additional Structures (Gazebo, Shade, Umbrella, etc.)	
	Total Estimate:





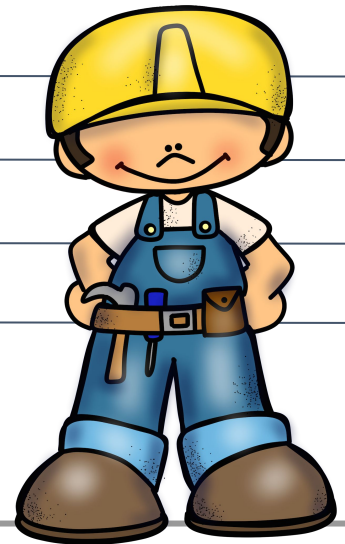
Courtyard Schematics

West Courtyard			East Courtyard		
Zone	Area	Fraction of Area	Zone	Area	Fraction of Area
Zone 1: _____			Zone 1: _____		
Zone 2: _____			Zone 2: _____		
Zone 3: _____			Zone 3: _____		
Zone 4: _____			Zone 4: _____		
Zone 5: _____			Zone 5: _____		
Total			Total		





Pitch Outline



Pitch Checklist

- | | |
|--|--|
| ☐ Will you engage/hook the audience? | ☐ Did you create a model of your solution? |
| ☐ Do you include your driving question? | ☐ Do you have multiple activity options, content areas, and a flexible space? |
| ☐ Did you describe the process? | ☐ Did you include budget and schematics? |
| ☐ Did you explain the research? | ☐ Will you explain why it's important? |



Project Reflection

The biggest challenge my
team faced was...

One thing I learned was...

I used to think...
Now I think...

I am proud of
myself because...

My favorite
memory is...



Our Team

