

# District Green Team Informational Meeting



February 28, 2018

# Agenda

- 7:00 – Purpose, role, and introductions
- 7:05 – Green schools and key factors
  - Sustainable design categories
- 7:25 – World café activity
- 8:10 – Wrap up and next meeting

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# COMMITTEE ROLES

INFORM



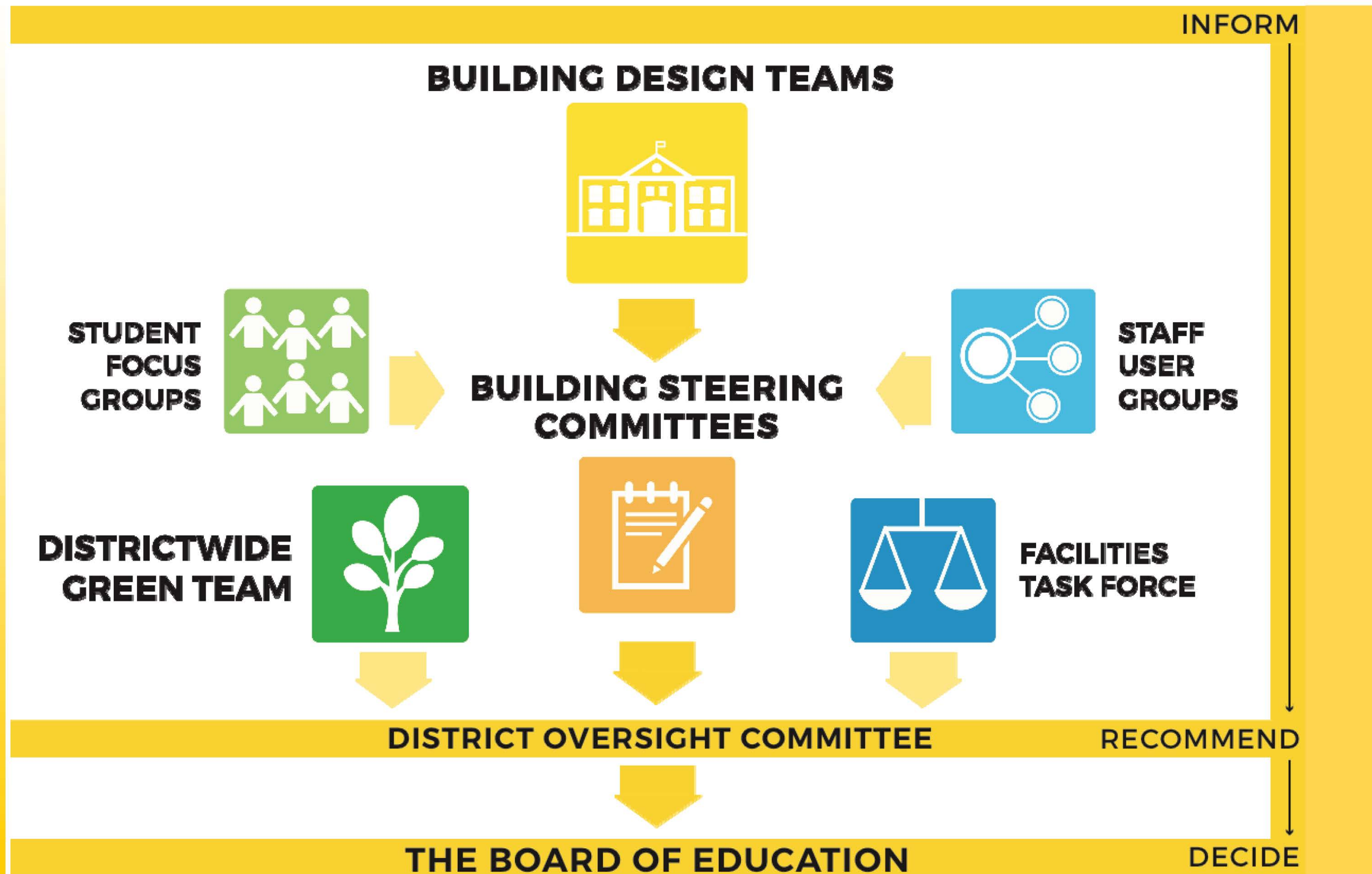
RECOMMEND



DECIDE



# District Green Team







District Green Team

# INTRODUCTIONS

**DISTRICTWIDE  
GREEN TEAM**



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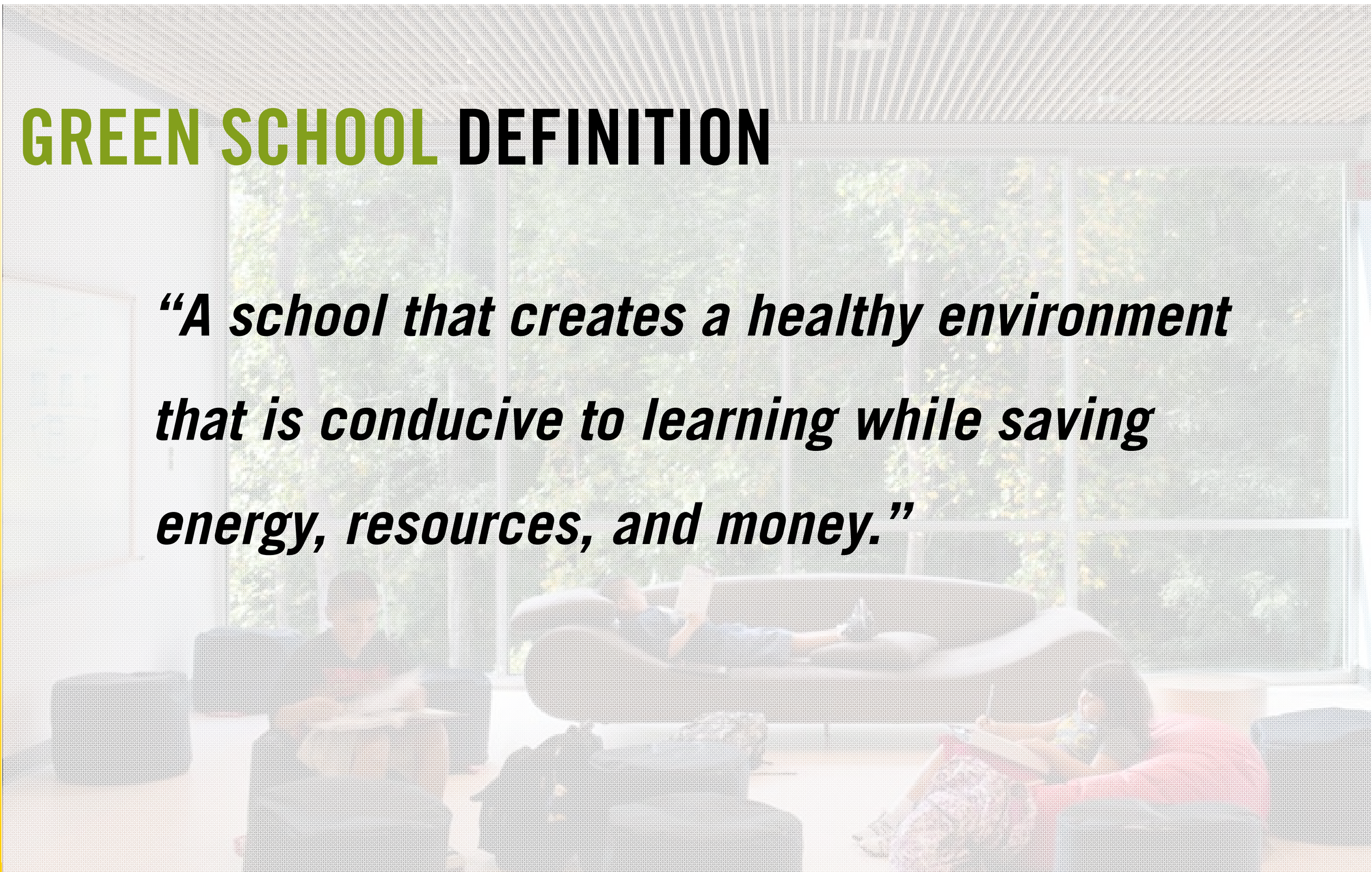
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## GREEN SCHOOL DEFINITION

***“A school that creates a healthy environment that is conducive to learning while saving energy, resources, and money.”***







# WHAT IS A SUSTAINABLE OR 'GREEN' SCHOOL?

- **USES LESS ENERGY AND WATER**
- **LESS COSTLY TO OPERATE**
- **REDUCES ENVIRONMENTAL IMPACT**
- **ENVIRONMENTALLY PREFERRED PRODUCTS**
- **HEALTHY INDOOR AIR QUALITY**
- **DAYLIGHT AND VIEWS**





# HOW **GREEN** SHOULD OUR NEW SCHOOLS BE?

- **GOALS AND PRIORITIES**
- **COSTS (first, operating, life cycle, ROI)**
- **DESIGN AND PERFORMANCE**
- **EDUCATIONAL OPPORTUNITIES**
- **TOLERANCE FOR INNOVATION**
- **SOCIETAL ASPECTS**





# **SUSTAINABLE DESIGN EXPLORATION**

- **ENERGY – PASSIVE, ACTIVE, & RENEWABLES**
- **WATER – BUILDING & SITE**
- **MATERIALS – CONTENT AND SOURCE**
- **INDOOR AIR QUALITY AND ENVIRONMENT**
- **SITE – HARDSCAPE, LANDSCAPE, & STORMWATER**
- **RESILIENCE – PREPAREDNESS AND COMMUNITY HEALTH**
- **OPTOMIZED PROGRAM – FLEXIBILITY AND SQ. FT REDUCTION**
- **FINANCIAL – OPERATIONS, PAYBACK & GRANTS**





# **SUSTAINABLE DESIGN EXPLORATION**

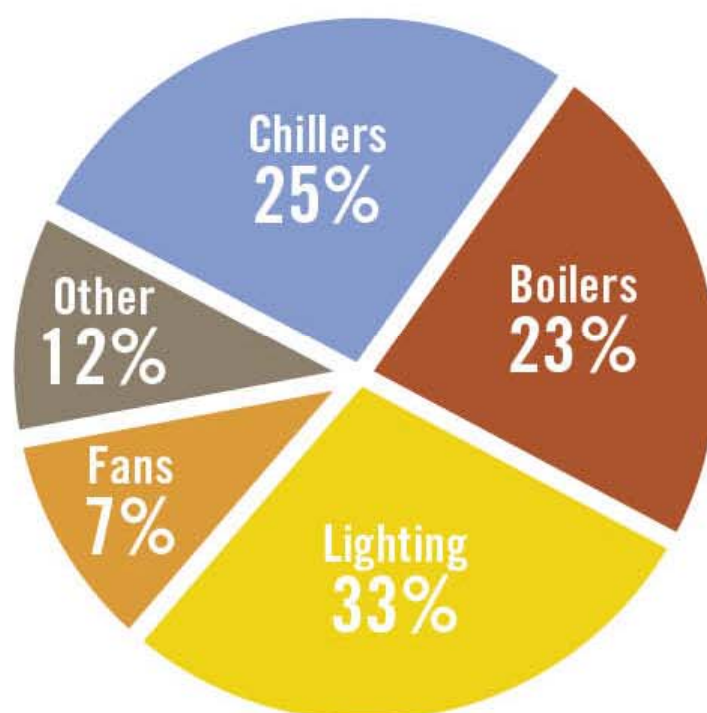
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# ENERGY USE

## Understanding Energy Use in Schools



This will vary depending on your climate region.

How much does your school spend each year on energy?

**Elementary School:**  
\$70,000 to \$150,000

**Middle School:**  
\$100,000 to 200,000

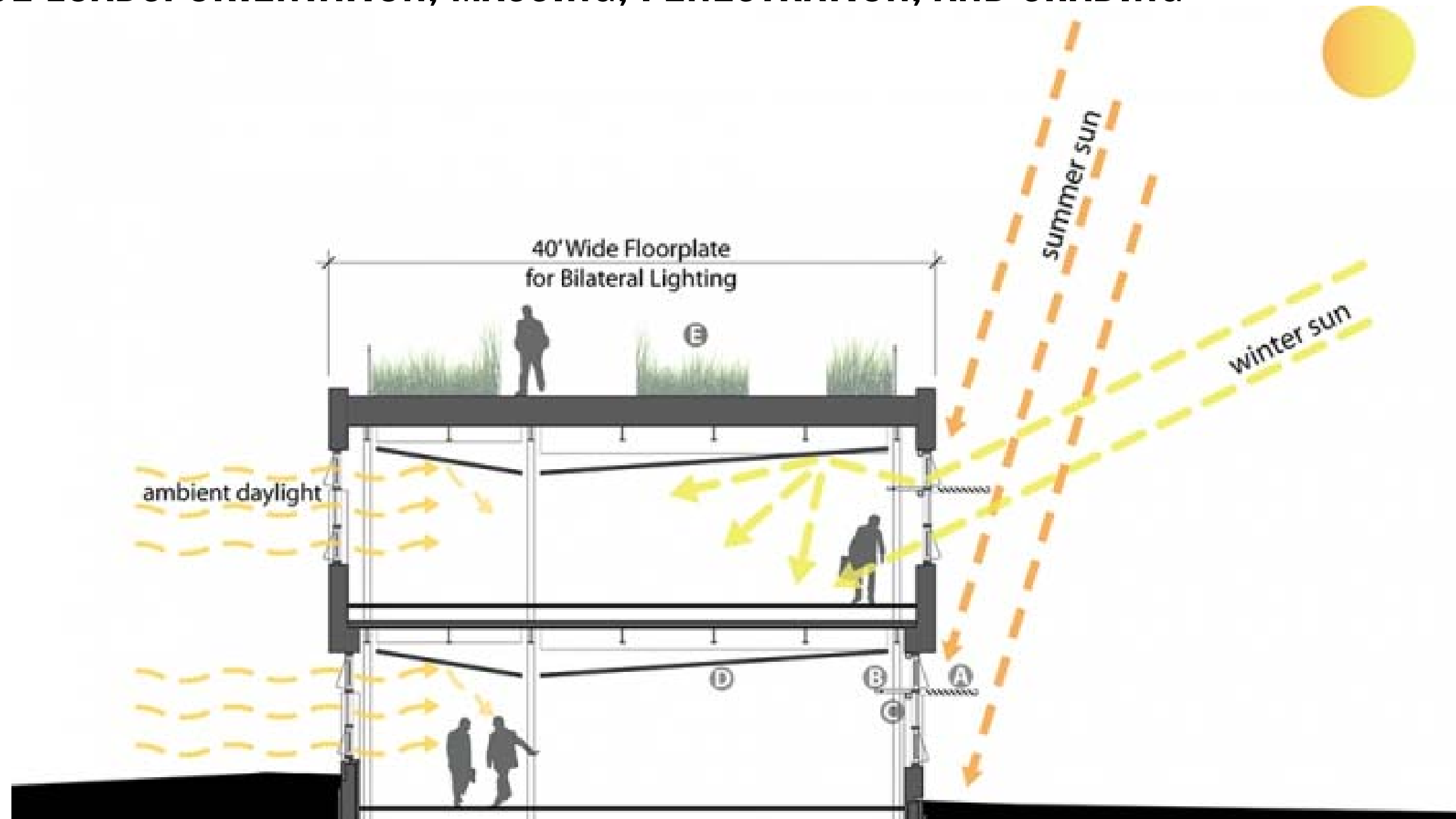
**High School:**  
\$200,000 to \$650,000





# ENERGY USE - STRATEGIES

REDUCE LOADS: ORIENTATION, MASSING, FENESTRATION, AND SHADING



Energy Use



# ENERGY USE - SYSTEMS

## OPTIMIZE PERFORMANCE







# ALTERNATIVE AND RENEWABLES

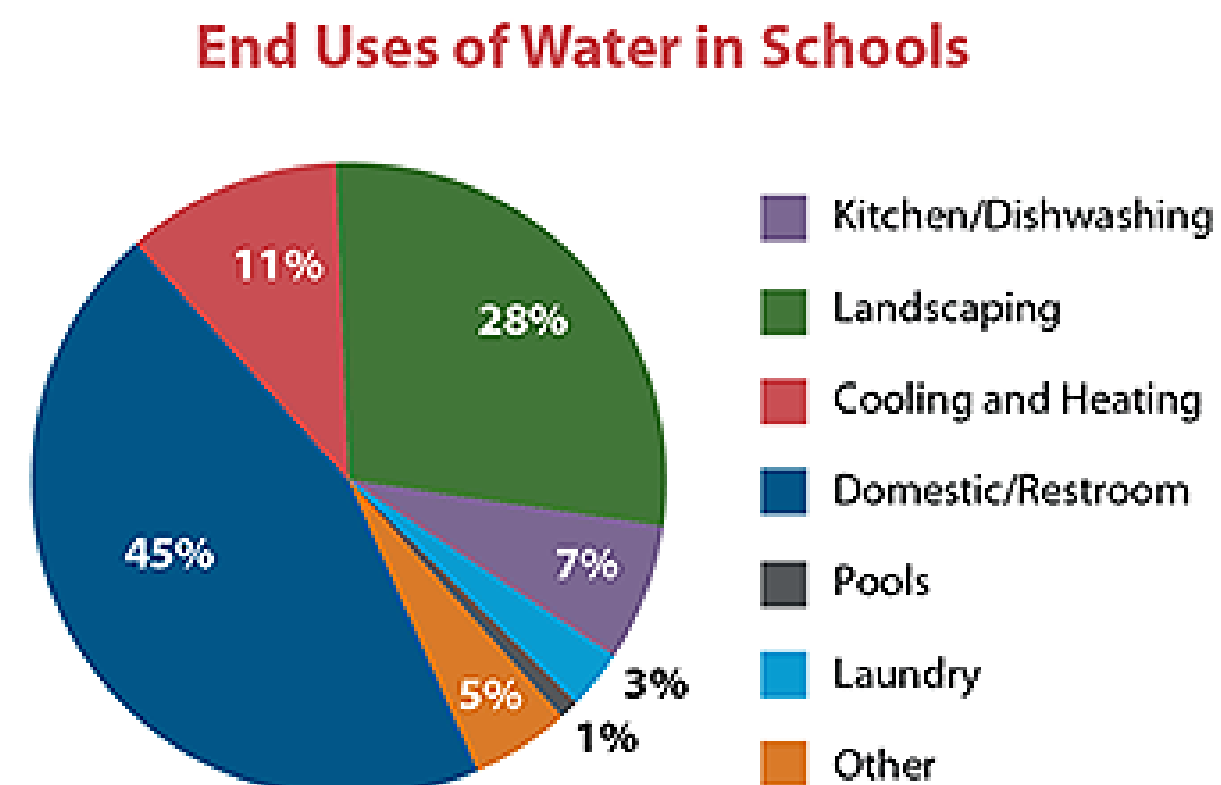
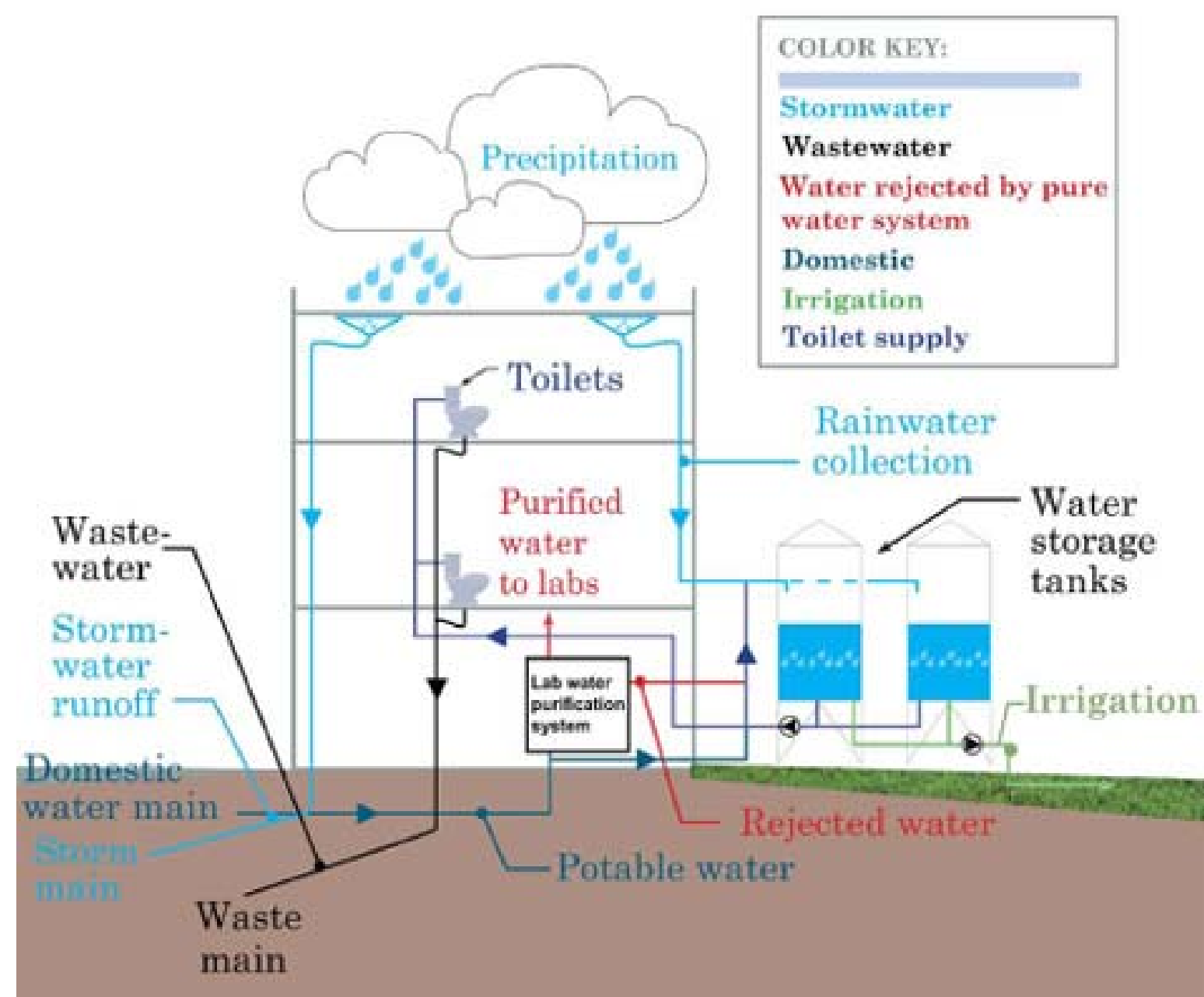
Energy Use





# WATER USE

## CONSERVATION & REUSE

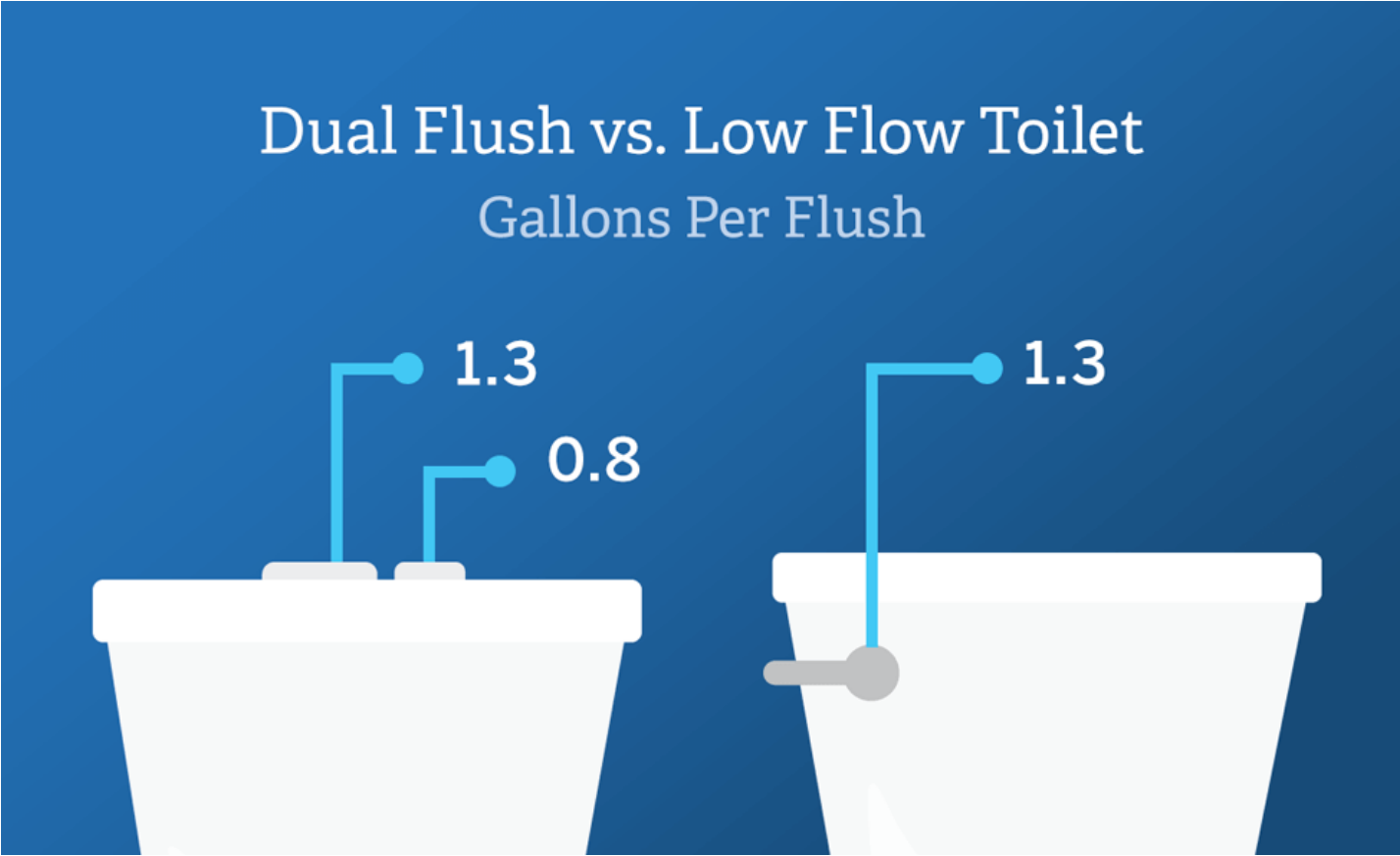






# WATER USE

## CONSERVATION







# MATERIALS

## TYPICAL CLASSROOM



Materials

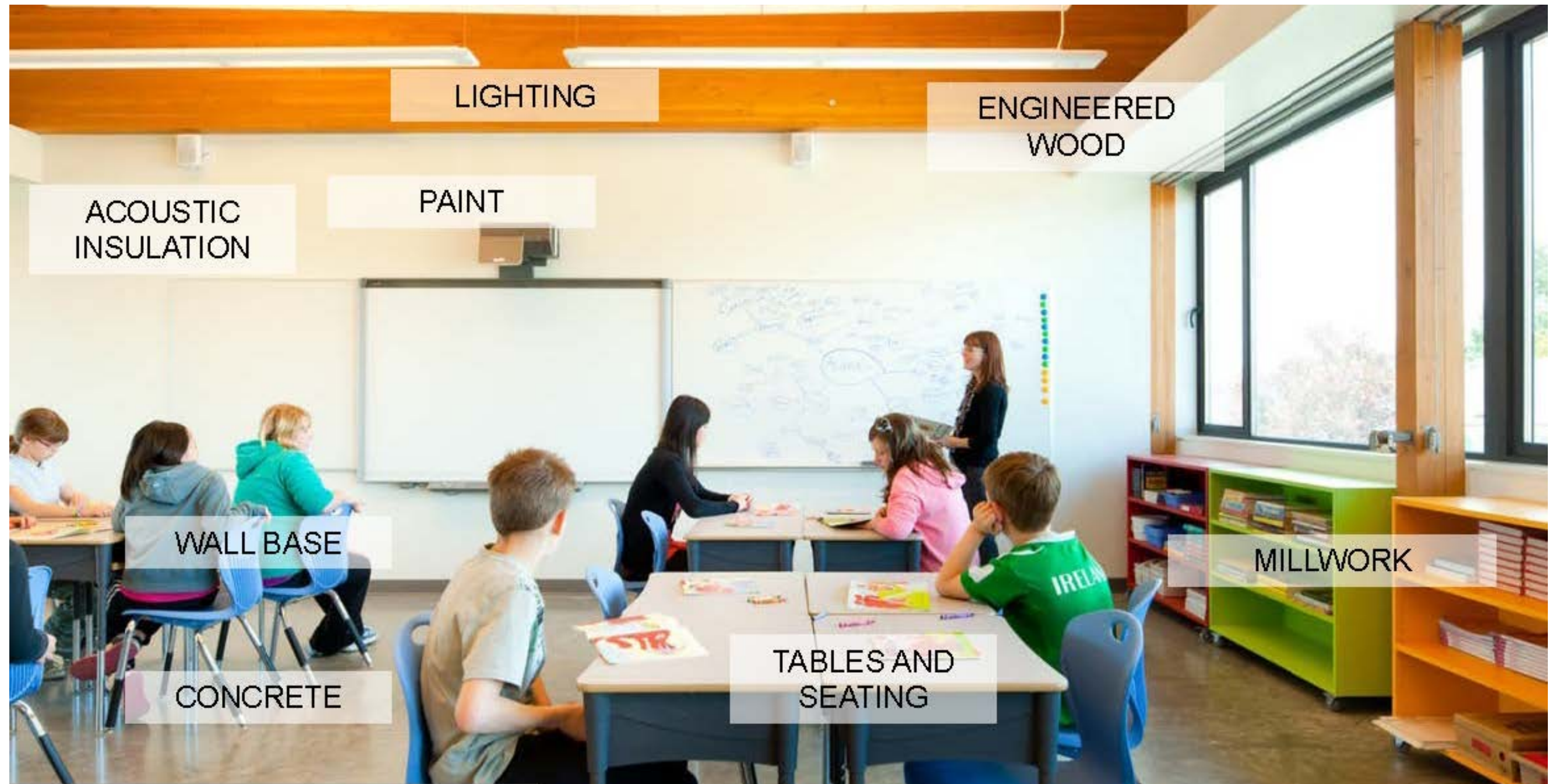




# MATERIALS

## TYPICAL FINISHES

Materials

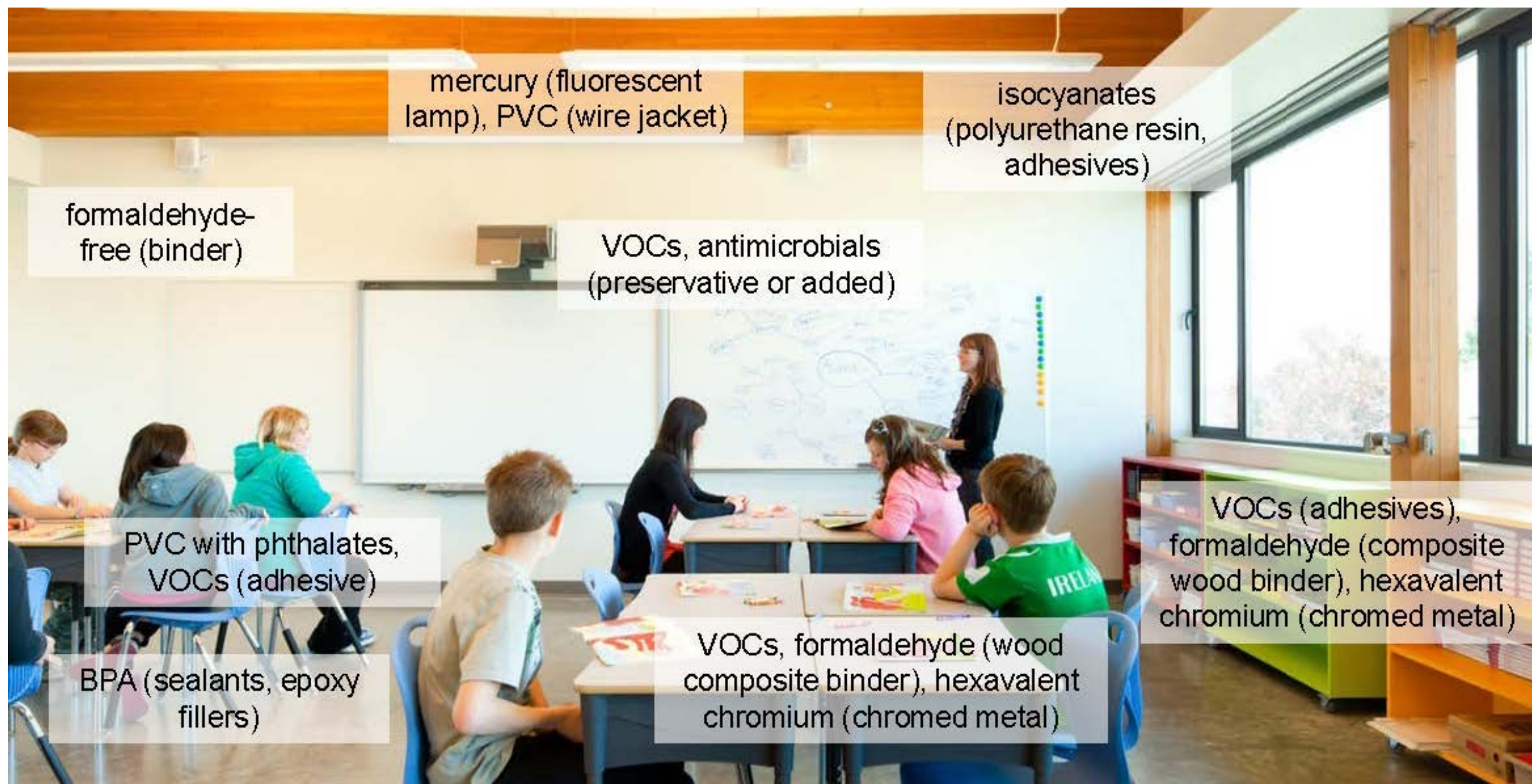






# MATERIALS

## TYPICAL HAZARDS FOUND



Materials

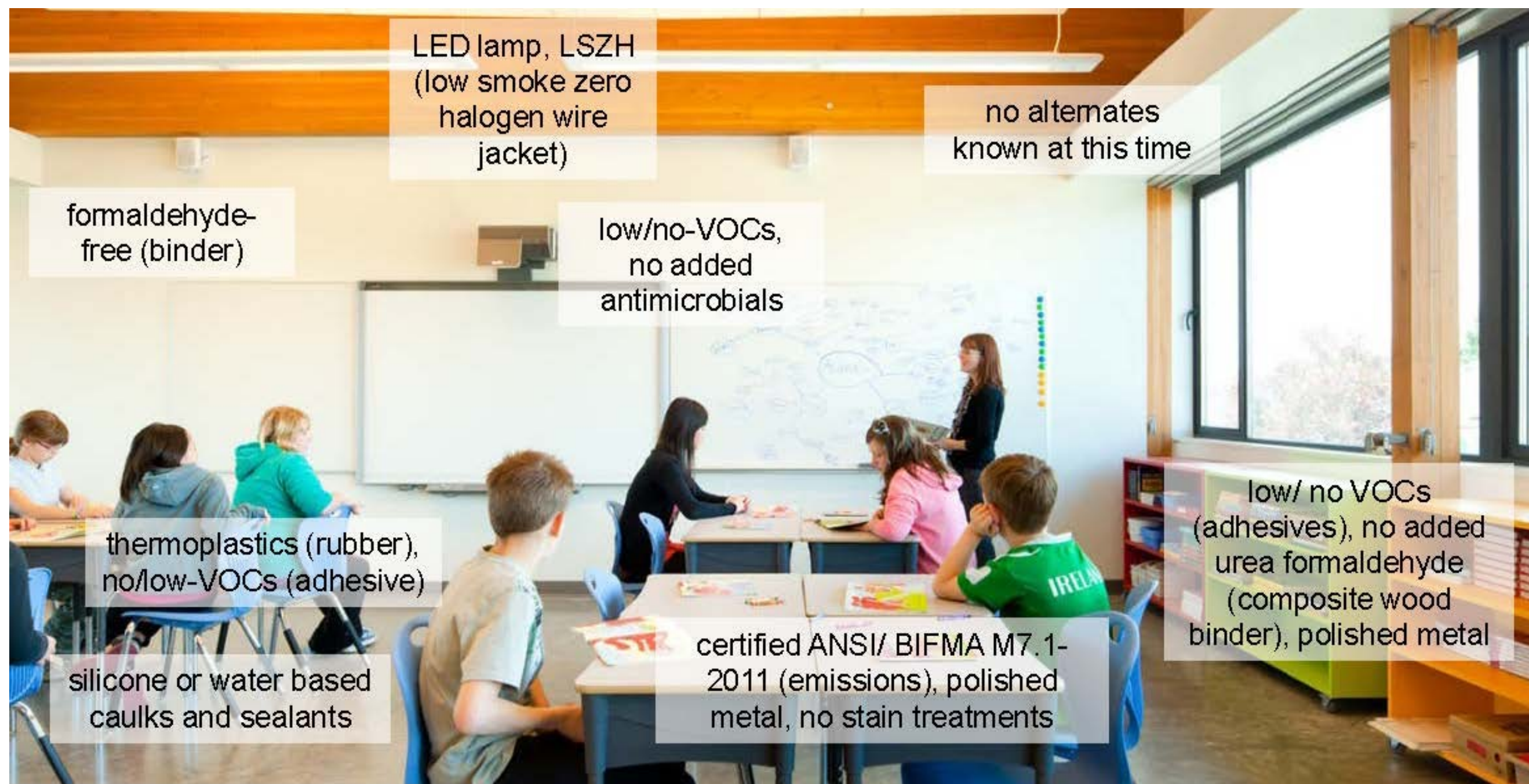




# MATERIALS

## HEALTHY ALTERNATES

Materials







Indoor Environmental Quality

# IEQ

## ACCESS TO DAYLIGHT AND VIEWS





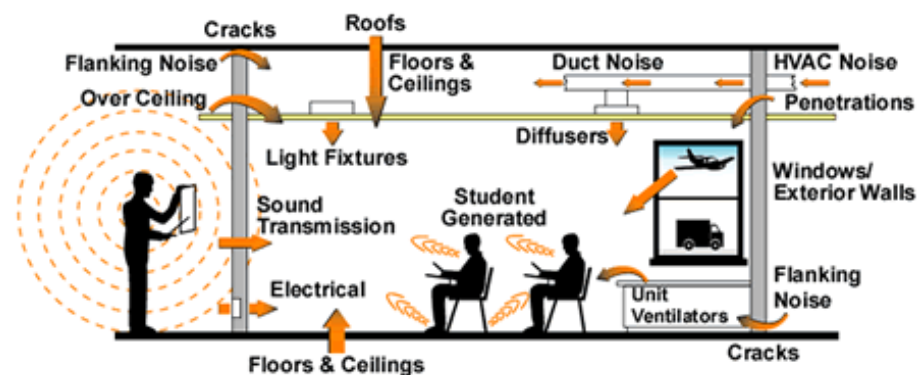


# IEQ

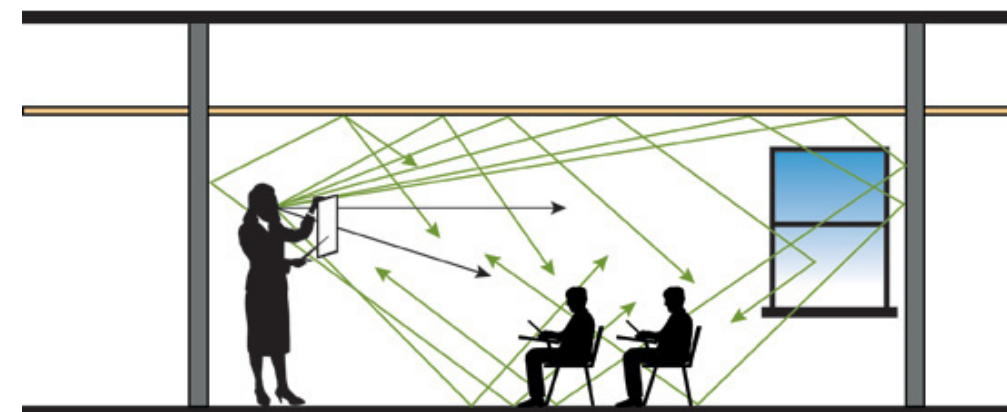
## ACOUSTICS

### AMBIENT OR BACKGROUND NOISE LEVEL

Is the totality of all sounds within the room when the room is unoccupied.



### HARD SURFACE CLASSROOM

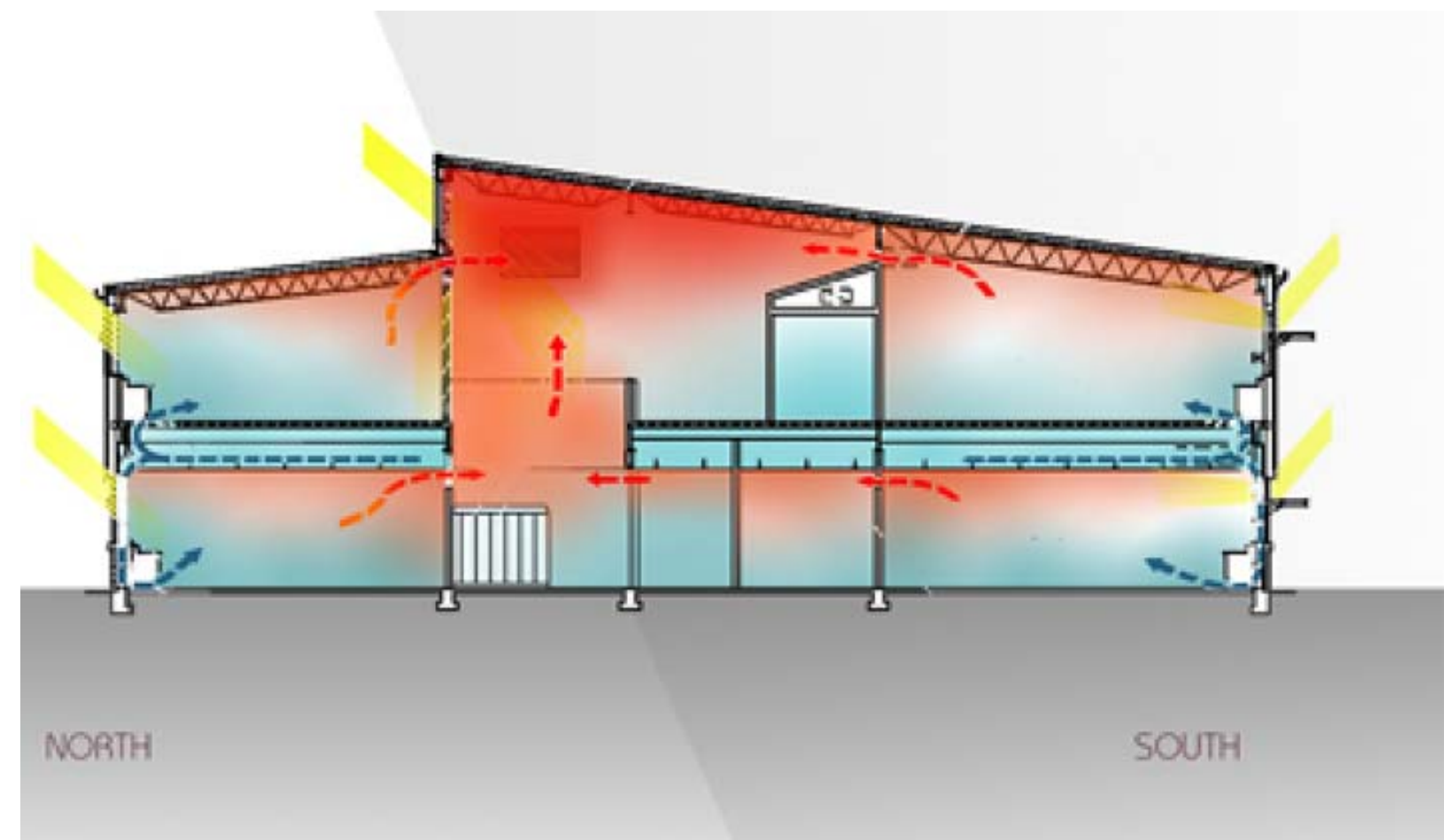
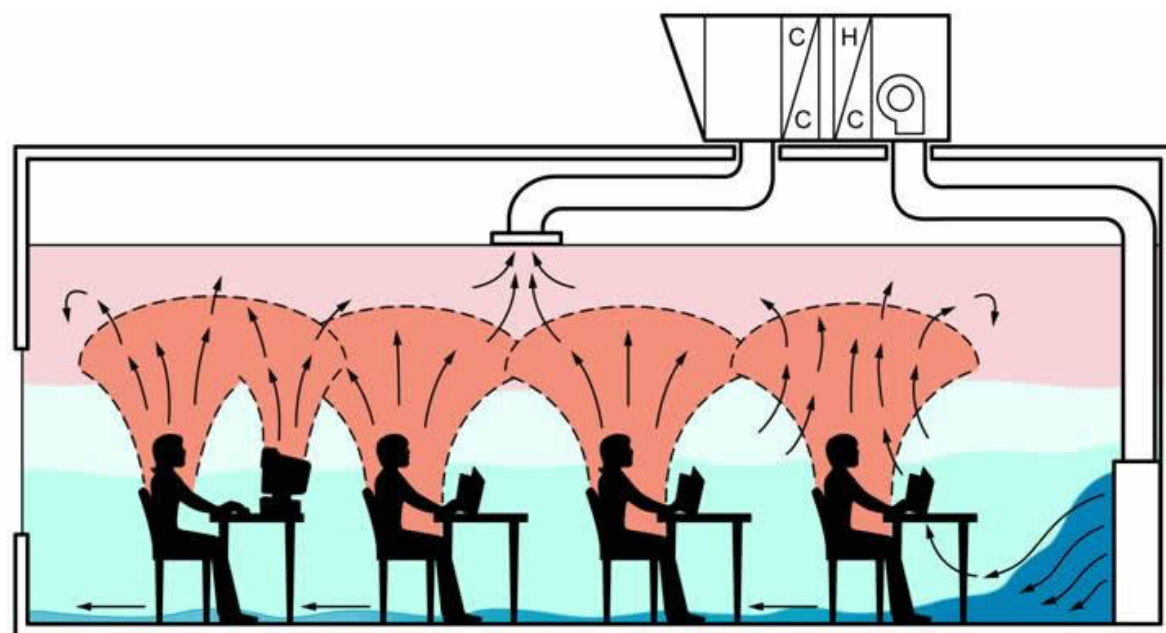






# IEQ

## THERMAL COMFORT





# SUSTAINABLE SITES

## STORMWATER MANAGEMENT





# SUSTAINABLE SITES

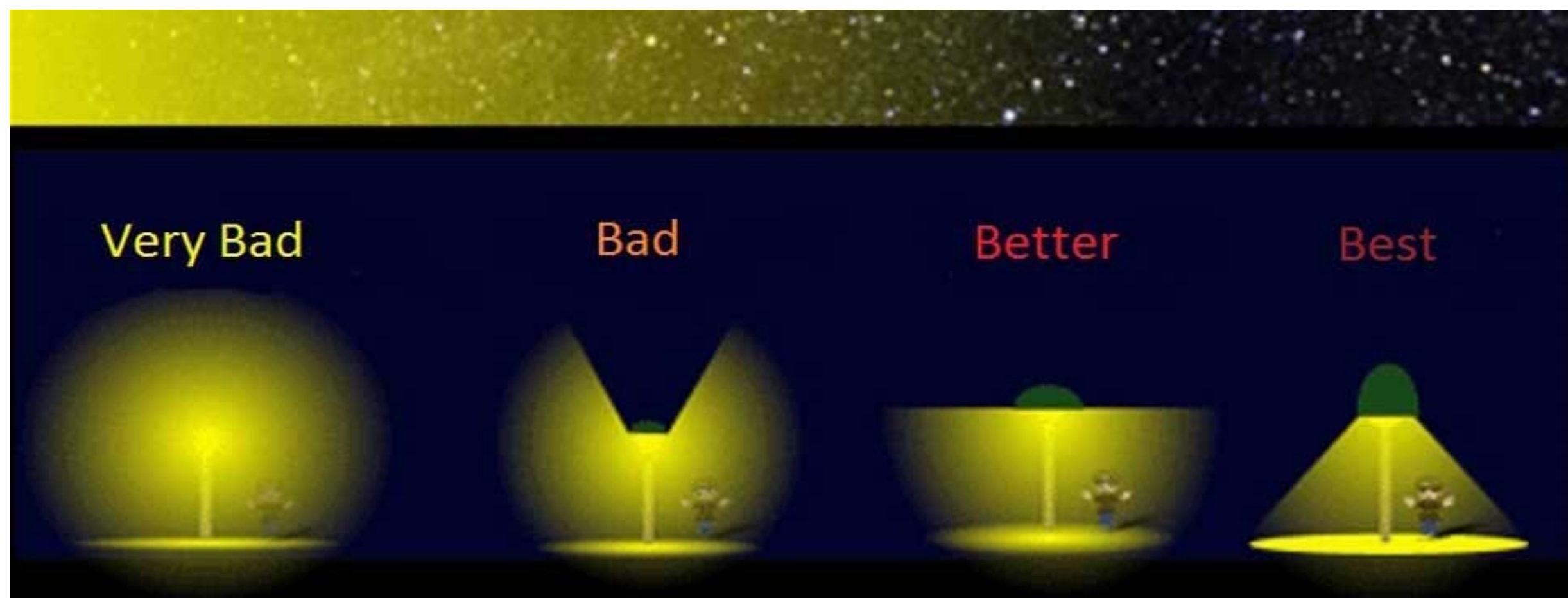
## HEAT ISLAND EFFECT





# SUSTAINABLE SITES

## REDUCED LIGHT POLLUTION





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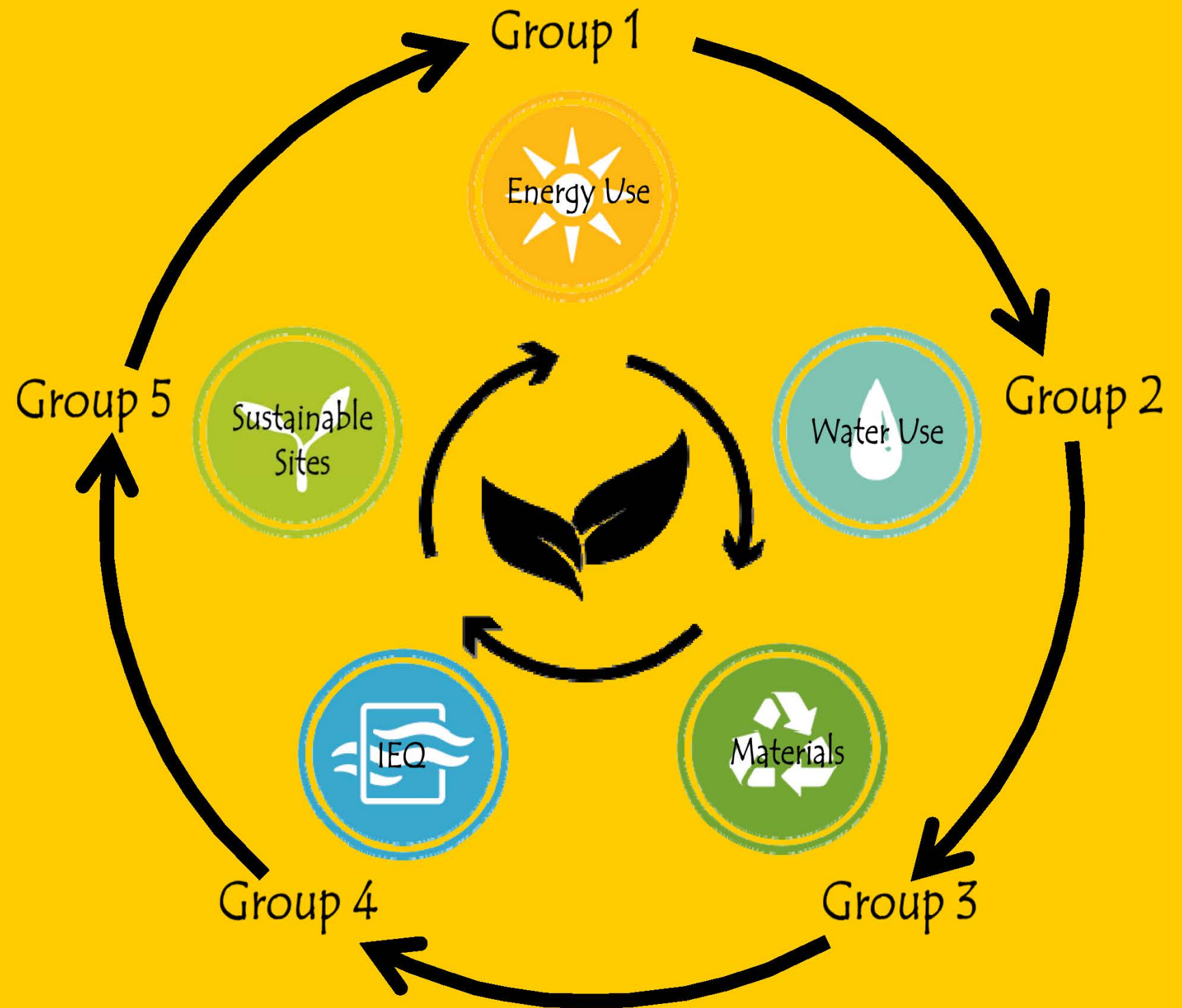
8:10 – Wrap up



World Cafe



1. Self-divide into 5 equal groups...
2. Each group works on one question for 5 minutes...
3. Rotate to next group leaving one person behind to share with next group...
4. Work on next question for 5 minutes....
5. Rotate...work...rotate
6. Report out





From your perspective...for each category...

What sustainable strategies  
should we explore?





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# District Green Team Next Meeting



Tuesday, March 20, 2018

Topic: Prioritizing your suggested strategies