

SPACE TYPES & REQUIREMENTS



Science Laboratory

School Type:



Functional Area Descriptions

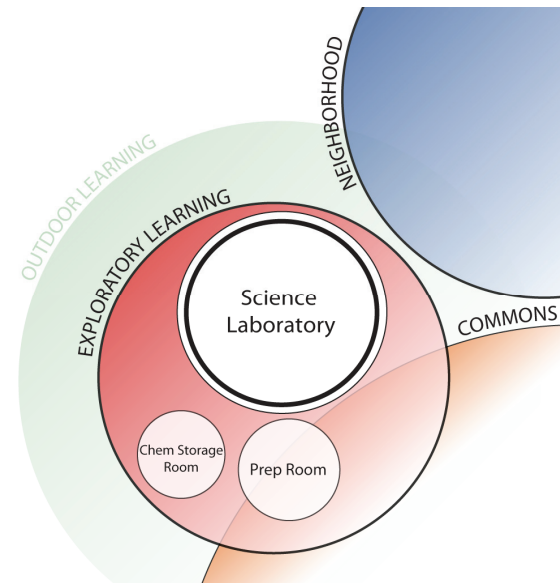
The science lab is a space designed to support flexible, dynamic scientific and technological exploration. This space should be designed to support a variety of learning strategies and educational applications. The lab will also provide a space for project-based applications. Students learn by demonstrations, audiovisual presentations, independent work, and group work at laboratory workstations. The space should be open and flexible, have access to utilities, good ventilation, and be equipped with durable stain and chemical-resistant floor and countertop work surfaces.

A teacher planning area is provided within the neighborhood.

1 Science Laboratory

The science labs should be arranged for efficient plumbing, mechanical, electrical and communication services. They should be located near the neighborhoods, but not distributed individually within the neighborhoods. A secondary connection to one science lab in each neighborhood is desirable, but the primary access to this space should be to students outside the neighborhood. Provide one science lab per 100 students. The success of the room depends on the use of a coordinated system of workstations and perimeter service modules. The

Adjacency Diagram



Planning Requirements

Area Description	SF	M ²	Notes
Science Laboratory			
1 Science Laboratory	1,200	111	
2 Prep Room	200	19	300 SF if shared by two wet labs
3 Chemical Storage Room	100	9	One per school
Total	1,500	139	

movable workstations and built-in perimeter casework/sinks with water faucets and electrical/data outlets allow the conversion of the space from one use to another. Use portable gas cylinders instead of piped-in gas. Tables should be accessible to students using wheelchairs. Computers and printers are an integral part of the curriculum and must be considered in the design of the lab station equipment. An emergency shower/eyewash should be provided. Proper ventilation is an important functional requirement to consider.

This lab should provide space for the following:

- Work tables and lab seating
- Comfortable ergonomic student chairs
- Mobile teaching station
- Hanging display area [i.e. atom models, DNA models, cells, etc.]
- Water and utilities
- Lockable base cabinets
- Lockable overhead cabinets
- Bookshelves
- Built-in storage - variety of open, closed, and lockable
- Magnetic marker board
- Countertop material of resin or acid-resistant plastic laminate
- Flexible or multiple display surfaces
- Upper cabinets glazed for display of projects and glassware

2 Prep Room

The prep room includes a teachers preparation area including built-in casework with access to sinks, gas, and electrical outlets. The prep room is directly

accessible from the lab. A pass-through fume hood should be provided between the prep room and the lab. The fume hood should not interfere with interactive whiteboards or marker boards. A refrigerator should be provided in this room.

Maximize the use of wall space above the workstations with wall-mounted cabinets for storage. Provide built-in cabinets for secure storage of equipment and materials and counter space for printers and other peripheral devices.

3 Chemical Storage Room

The chemical storage room includes space for the central storage of shared supplies and the storage of flammable and chemical supplies. A lockable, fire resistant, ventilated chemical storage cabinet should be provided. The storage room shall be directly accessible from the corridor. One storage room shall be provided per school.

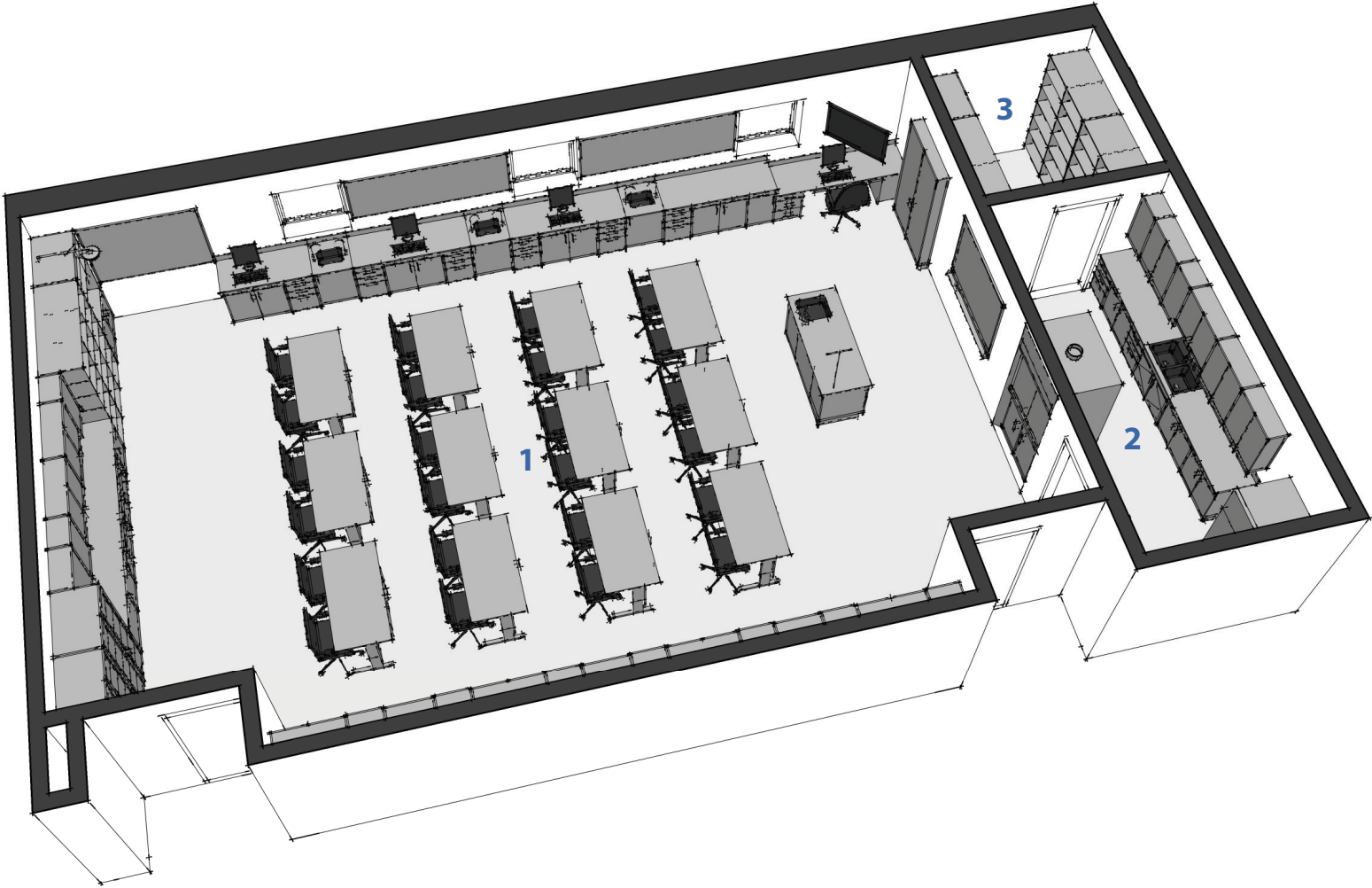


► KSC International School, Mitchell Giurgola Architects, New York, NY



► Portsmouth HS, Portsmouth, OH; Fanning/Howey Associates, Inc.

NOTE: Images shown are intended to provide real-world examples and spark design creativity.



Science Lab Concept Perspective

NOTE: 3D illustrations are shown for informational purposes and are not intended to limit design options.