
The Challenges of Designing a One-Room Schoolhouse

Before we had our modern schools with libraries, kitchens, faculty lofts, science labs, art studios, multiple classrooms, and a great room, schools were a lot simpler. The one-room schoolhouse for a mixed-age group of students was very common around the world, and still is in some places. For this POW, we would like everyone to design a one-room schoolhouse of their own, but not for a school the size of PFS; for this project we'll design schools for 10-15 students with one or two teachers. Maybe you might even want to think about a group from our community that was recently displaced...

Before you begin, you'll need to do some thinking and make some choices:

- Will you be designing a fantasy schoolhouse, something fun and creative, or will you be working on something more realistic?
- What are the needs of the teachers and the students and how will your design address those needs?
- If you're doing a more realistic design, how will you balance design and function?
- Is there a way to be creative in your design and still make something that would work in reality?

1) Make a floor plan of your schoolhouse, showing doors, windows, and important pieces of furniture (**please work in pencil**). Use rulers and protractors to help you. **Indicate the scale** of your drawing. For example, you might choose a scale of 1 cm = 1 ft. Drawing on a blank sheet of paper placed over a sheet of cm graph paper might help. **Indicate which direction is north** in your floor plan.

2) Describe your schoolhouse in one paragraph or more. Make sure your ideas and words are clearly represented in your floor plan.

3) Can you make a site plan, showing your schoolhouse and the surrounding area? Include important features like a parking lot, playground, and other things your school may need.

4) How about creating a separate detailed drawings of any special features. For example, some classrooms have a loft area. Is there an indoor sand pit? Water exploration area? Epic reading fort?

5) Make one or more elevations of you schoolhouse. These are scale drawings showing one wall from the outside. You might also want to show an interior elevation, showing windows, bulletin boards, cabinets, and other features.

6) Can you make a perspective drawing of your schoolhouse?

7) Sometimes architects make three-dimensional models of their plans. Are you feeling ambitious?

8) Think about your school as if it were going to be built. Do you see any potential issues? Do you think it would be a design that students would like? How about teachers and parents, would they like the design as well? How does the space best accommodate for the needs of the students and teachers you named earlier? How is design and functionality addressed in your plan? Answer these questions with a few sentences or a paragraph.

9) Prepare a short (3-4 minute) presentation for your school house. Pretend you are presenting to a group of interested parents who might want to send their children to your school. During class, make your presentation and field questions from the audience.

10) Have Fun!!!