

## Piano Schedule

You need to practice the piano 2 hours every week before your lesson on Friday afternoon. Your teacher says not to work more than 20 minutes at a time.

Show what your practice schedule might look like.

---

# Exemplars

---

## Piano Schedule

### Suggested Grade Span

Pre-K-2

### Task

You need to practice the piano 2 hours every week before your lesson on Friday afternoon. Your teacher says not to work more than 20 minutes at a time.

Show what your practice schedule might look like.

### Alternate Versions of Task

#### More Accessible Version:

You need to practice the piano 2 hours every week. Your teacher says not to work more than 20 minutes at a time. If you practice for 20 minutes a day for 7 days, will you get in the number of hours of practice that you need?

#### More Challenging Version:

You need to practice the piano 2 hours every week before your lesson on Friday afternoon. Your teacher says not to work more than 20 minutes at a time. Show what your practice schedule might look like.

If you practice the same amount of time each day, for 7 days, for a total of 2 hours, how much time will you spend practicing each day? Round your answer to the nearest minute.

### Context

Knowing how to schedule your time is an important concept. We talk in class each day about what the day's schedule will look like, but I wanted to look at a long range schedule. I wanted to see how many students would connect the use of a calendar in helping them represent their schedule. Notice the prompt does not make that connection for them. I was also assessing students on their knowledge of the number of minutes in an hour.

### What This Task Accomplishes

This task will show me what students are comfortable working with time - one of the most difficult concepts to learn. I also wanted to see how students would take an amount of time and break it into parts.

# Exemplars

## What the Student Will Do

Some students immediately drew a calendar. Others played around with some numbers of minutes until they had an idea.

## Time Required for Task

30 minutes

## Interdisciplinary Links

This task goes nicely with a discussion of time or planning your work (and play).

## Teaching Tips

The amount of preparation you do with your students will depend on whether you want to use this as an assessment task or a teaching task. If you want to use it as an assessment problem, you will do less preparation.

## Suggested Materials

- Calendars (if students ask for them)
- Graph paper

## Possible Solutions

Various solutions form, 20 minutes a day for six days. Do a practice schedule dividing the day into morning and afternoon with differing times at each session.

### More Accessible Version Solution:

$$20 \times 7 = 280 \text{ minutes}$$

$$2 \times 60 = 120 \text{ minutes}$$

So yes, you will practice the suggested number of hours.

### More Challenging Version Solution:

$$2 \times 60 = 120 \text{ minutes} \div 7 = \text{approximately } 17 \text{ minutes a day}$$

Day	Number of Minutes	Total Minutes Practiced
Saturday	1	1
Sunday	2	3
Monday	4	7

---

# Exemplars

---

Tuesday	8	15
Wednesday	16	31
Thursday	32	63
Friday Morning	64	127

## Task Specific Assessment Notes

### Novice

The student's work shows no apparent understanding of the problem. The list of hours does not relate to days of the week and the solution of 16 hours does not solve the problem.

### Apprentice

This solution shows some understanding of a schedule for the week. However, the student has half hour practice times for each day (not indicating how the half hour should be split up). The total practice time is correct at two hours.

### Practitioner

The student shows an understanding of the problem and its parameters. S/he indicates two practices on Monday and Thursday of 20 minutes each and one 20 minute practice on Tuesday and Wednesday. The student also offers verification of the solution in equation form (although there is an error with a multiplication sign instead of an addition sign).

### Expert

This solution shows a broad understanding of the problem. The student shows that there are many solutions to the task. The solutions are verified by mathematical equations.