

Rubric: Let's Plan a Party!

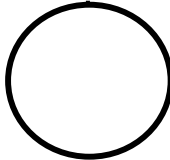
Key APS Mathematics Performance Standards:

Target Performance Standards – Grade 2:

1. **Describes** the relationship between units of time (e.g., minutes in an hour, hours in a day, days in a week/month and year, months in a year).
2. **Reads and writes** time to the quarter hour using digital and analog (face) clocks.
3. **Communicates** mathematical thinking coherently and clearly to others.

- If the student does not attempt to solve the task or the work on the problem is completely unrelated to the task, the student's work for the task is considered '**Unscorable**' and should not be assigned a performance level of Novice, Apprentice, Practitioner, or Expert.

Level	Understanding	Strategies, Reasoning, & Procedures	Communication
Novice	<ul style="list-style-type: none"> ❖ The student understands that s/he needs to organize activities for the party, but does not choose the activities according to their time allotments. ❖ The student does not understand the concept of one-hour equaling 60-minutes. 	<ul style="list-style-type: none"> ❖ The student has started the task using manipulatives or representations, but does not use an effective strategy to plan the 60-minute party, therefore cannot complete the task and/or find a correct solution. <p>Sample Strategy: The student chooses activities without regard to times. At the party we will:</p> <ul style="list-style-type: none"> Sing Video Cake and Ice Cream Play Outside Dance 	<ul style="list-style-type: none"> ❖ There is little or no communication, the student did not label the work, and/or their thinking is difficult to follow. ❖ Summary: The student cannot write/verbalize his/her final answer, and/or uses little or no math language and symbols to explain (verbally or in writing) how s/he organized the activities for the party. ❖ Representations: The student has no system (charts/t-tables/graphs) to track the activities and times for the party.

<p>Apprentice</p>	<ul style="list-style-type: none"> ❖ The student understands that s/he must organize the activities for the hour-long party. ❖ The student is developing the concept of time and can choose activities related to time, but cannot total the time and/or add the times correctly. 	<ul style="list-style-type: none"> ❖ The student has started the task using manipulatives or representations, has chosen an effective strategy to plan the 60-minute party, but does not achieve a correct solution. <p>Sample Strategy: The student chooses activities, but does not add the times, the activities do not total 1 hour, or the times are not totaled correctly.</p> <p>Singing: 10 minutes Cake and Ice Cream: 15 minutes Musical chairs: 15 minutes Videos: 30 minutes</p>	<ul style="list-style-type: none"> ❖ The student has communicated his/her understanding of the task by labeling their work, but the task is not clearly organized and the student's thinking is hard to follow. ❖ Summary: The student states his/her final answer and uses some math language and symbols to explain (verbally or in writing) how s/he organized the activities for the party. ❖ Representations: The student can represent the activities for the party, but has not established an accurate system (charts/t-tables/graphs) to track the activities and times for the party.
<p>Practitioner</p>	<p style="text-align: center;">Proficiency</p> <ul style="list-style-type: none"> ❖ The student understands that: <ul style="list-style-type: none"> • S/he must organize the activities for the hour-long party. • One hour equals 60-minutes and can accurately organize the activities to total one hour. 	<p style="text-align: center;">Proficiency</p> <ul style="list-style-type: none"> ❖ The student must have a correct solution and can demonstrate one strategy to plan the activities for the 60-minute party. ❖ The student uses the concept of an hour of time to determine the activities for the party. <p>Sample Strategy: The student plans the activities around the concept of 60-minutes:</p> <p>15 min. – play outside 15 min. – cake and ice cream <u>30 min.</u> – video 60 min. = 1 hour party</p> <ul style="list-style-type: none"> • Note: The strategy demonstrates that the activities total 1 hour. • The student can use fraction circles to represent the one hour of activities: <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;"> <p>30-minute activity Video</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> <p>15-minute activity Cake & Ice Cream</p> <p>15-minute activity Play Outside</p> </div> </div>	<p style="text-align: center;">Proficiency</p> <ul style="list-style-type: none"> ❖ The student can represent his/her work in a clear, organized manner. ❖ Summary: The student states his/her final answer and uses appropriate math language and symbols to explain (verbally or in writing) how s/he organized the activities for the party. ❖ Representations: The student can represent the hour of activities for the party using manipulatives and/or drawings, and has created an efficient system (charts/t-tables/graphs) to track the activities and times for the party.

<p>Expert</p>	<ul style="list-style-type: none"> ❖ The student understands: <ul style="list-style-type: none"> • S/he must organize the activities for the hour-long party. • One hour equals 60-minutes and can accurately organize the activities to total one hour. • The concept of elapsed time and can accurately organize the activities to total one hour using clock math. ❖ Task Extension: The student includes a rule, equation, generalization, and/or observation (verbal or written) about their understanding of time. 	<ul style="list-style-type: none"> ❖ The student must have a correct solution and demonstrates one or more strategies to determine the activities for the 60-minute party. ❖ The student demonstrates the concept of elapsed time through their use of clock math, and/or can total the activity times using an addition strategy. <p>Sample Strategy: The student demonstrates elapsed time on the clock: 9:00 – 9:15: play outside 9:15 – 9:30: cake and ice cream 9:30 – 9:45: paint pictures 9:45 – 10:00: bean toss</p> <ul style="list-style-type: none"> ❖ Task Extension: “Each activity will take $\frac{1}{4}$ of an hour so there will be 4 activities for the party.” 	<ul style="list-style-type: none"> ❖ The student can represent his/her work in a clear, organized manner. ❖ Summary: The student states his/her final answer and uses appropriate math language and symbols to explain (verbally or in writing) how s/he organized the activities for the party. ❖ Representations: The student can represent the hour of activities for the party using manipulatives and/or drawings, and has created an efficient system (charts/t-tables/graphs) to track the activities and times for the party. ❖ Task Extension: The student includes a rule, equation, generalization, and/or observation (verbal or written) about their understanding of time.
----------------------	---	---	---