**Gina L. Gullo**

**Lesson Plan**

**1.** **Lesson** Snow Melts **Subject** Science **Date** 2/11/14

**2. Target Grade/Age Level:** Grades K-2, Autistic Support

**3. PDE Standards:**

Reading, Writing, Speaking and Listening:

1.4.**K**.B. Write, dictate, or illustrate to communicate information.

1.6.**K**.B. Speak clearly enough to be understood by all audiences using appropriate volume. Share stories, familiar experiences, and interests, employing gestures where appropriate.  
PA 1.6.**1**.B. Use appropriate volume and clarity in individual or group situations. Deliver brief oral presentations on a topic supported by visual aids.

1.6.**K**.A. Listen and respond appropriately to others in small and large group situations.

1.6.**1**.A. Listen actively and respond to others in small and large group situations with appropriate questions and ideas.

1.8.**K**.A. Ask appropriate questions on a variety of topics.

1.8.**1**.A. Generate appropriate questions about a topic.

Mathematics

2.3.**K**.C. Order events based on time

2.3.**1**.C. Tell time on an analog and digital clock to the nearest hour and half hour.

Science:

3.2.**K**.A1. Identify and classify objects by observable properties of matter. Compare different kinds of materials and discuss their uses.

3.2.**1**.A1. Observe and describe the properties of liquids and solids. Investigate what happens when solids are mixed with water and other liquids are mixed with water.

3.2.**1**.A4. Observe and describe what happens when substances are heated or cooled. Distinguish between changes that are reversible (melting, freezing) and not reversible (e.g. baking a cake, burning fuel).

Science as Inquiry:  
• Distinguish between scientific fact and opinion.

• Ask questions about objects, organisms, and events.

• Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.

• Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.

• Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information.

• Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.

• Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.

Student Interpersonal Skills:

16.2.**K**.A Interact with peers and adults in a socially acceptable manner.

16.2.**K**.C Engage in reciprocal communication with adults and peers.

**PA Common Core Standards:**

CC.1.5.**K**.E Speak audibly and express thoughts, feelings, and ideas clearly.

CC.1.5.**1.**E Produce complete sentences when appropriate to task and situation.

CC.1.5.**K-1**.G Demonstrate command of the conventions of standard English when speaking, based on kindergarten/Grade 1 level and content.

CC.2.4.**1-2**.A.2 Tell and write time to the nearest half hour (1)/ five minutes (2) using both analog and digital clocks.

*Note: Grade levels for all standards are bolded.*

**4. Learning Objectives and Aligned Summative Assessments:**

*Note: The overall objective is the aim of this lesson; however, individual IEP objectives are included in this lesson as they can be worked on in ways that complement the content of this lesson.*

| **Overall Learning Objective** | **Aligned Summative Assessments** |
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| Given a one-on-one question, the student will respond to the question, “What happens when snow is brought inside?” with a response indicating that it melts with 100% accuracy. | Summative interview |

| **IEP Based Learning Objectives by Student** | **Aligned Summative Assessments** |
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| Pink:  During small or large group instruction, Pink will sit appropriately (keeping hands to herself, waiting to be called on before speaking, sitting up straight, etc.) for at least 10 minutes for 5/5n opportunities presented.  During instructional time (i.e. work centers, deskwork, etc.), Pink will increase appropriate behaviors (task completion without incident) by reducing escape related behaviors in the form of saying, “I can’t do it,” flipping through her materials, staring at the instructor to direct attention away from the task, etc. from a current rate of approximately 6 per week to 1 or less per week.  Given an analog clock with a specific time, Pink will tell time to the hour for 9/10 opportunities.  Given instruction using a handwriting program, a small pencil (under 3” in length), and a visual model of each upper/lowercase alphabet letter and numbers 0-9, Pink will neatly copy each letter and number, with a concentration on correct formation with 80% accuracy.  Given instruction using a handwriting program, a small pencil (under 3” in length), and a visual model of her first name, Pink will copy her first name with a concentration on correct formation with 80% accuracy. | Weekly Probes  Weekly Probes  Weekly Probes  Weekly Probes  Weekly Probes |
| Red:  During small group instruction and when no prompt is given, Red will remain seated with a quiet voice for 15 minutes for 4/5 weekly opportunities over 3 consecutive probes.  During work stations/centers, Red will remain engaged in the task for at least 5 minutes before taking a break for at least 8/10 weekly opportunities over 3 consecutive weekly probes.  Throughout the school day, and when an item/ activity is or is not present, Red will accurately request and item/activity (e.g. say, “skittle” instead of “green”) using a phrase consisting of 2 or more words for at least 10 different items/activities throughout the school week over 3 consecutive weekly probes.  Given a written model of each capital letter and a pencil, Red will trace each letter within1/4” of the model with correct formation with 80% accuracy of all letters presented over 3 consecutive weekly probes. |
| Green:  During small/large group instruction in either the regular education or special education classroom, Green will remain on topic while contributing to the discussion (e.g. he will not bring up his dog while the group is discussing the weather, etc.) for 10/10 opportunities presented over 3 consecutive weekly probes.  Given an analog clock Green will tell time to the five minutes for each 1 o’clock – 12 o’clock hour with 100% accuracy over 3 consecutive weekly probes.  Given a pencil, a slant board and written model of his first and last name, Green will copy his first and last name with a concentration on both formation AND letter-to-line orientation with 100% accuracy for each criterion over 3 consecutive weekly probes.  Given a pencil, a slant board, and lined paper with a written model of each uppercase and lowercase letter, Green will copy each letter with a concentration on formation and letter-to-line orientation with 80% accuracy for each of the criterion over 3 consecutive weekly probes. |
| Blue:  Throughout the day, when a peer asks Blue a question, Blue will answer their question within 5 seconds for 9/10 opportunities present over 3 consecutive weekly probes.  When provided with a “question card” or a verbally prompted question, Blue will ask his peer a question and report the answer back to the instructor for 9/10 opportunities over 3 consecutive weekly probes.  During instruction time, and when asked at least 20 “how” questions, Blue will answer the “how” question or 20/20 questions over 3 consecutive weekly probes.  Throughout the school day (task demand, transitions, preferred activities, etc.), Blue will continue to improve appropriate behaviors (i.e. squeezing head or hands) by decreasing the number of times he hits the sides of his head/bangs his head, from a current rate of 230 per week to 5 or less per week over 5 consecutive weekly probes.  During group instruction (e.g. Morning Opening/Circle), Blue will independently ask for a break or remove himself from the group quietly and calm down for 90% of opportunities present throughout the school week over 3 consecutive weekly probes.  Given 3 dictated sentences (based on story summarization objective), Adam will write down the sentence as it is being dictated concentrating on proper capitalization with at least 80% accuracy of all letters written within the 3 sentences over 3 consecutive weekly probes. |
| Navy:  Given instruction using a variety of materials, including practice analog clock, the classroom clock, worksheets etc., Navy will independently and correctly tell time to the hour and half hour for 90% of opportunities presented over 3 consecutive weekly probes.  Given instruction within a small or large group setting, a visual picture cue, and an adult model, without verbal direction, Navy will follow the visual cues provided in order to modify his “listening manners” behavior by sitting appropriately on his chair, with quiet lips, quiet hands, quiet feet, eyes on speaker, and listening/following directions for 80% of opportunities presented over 3 consecutive weekly probes.  When participating in a group activity, or after he has completed an independent activity, and Navy wants to gain the attention of an adults, Navy will independently raise his hand to gain attention from an adult while remaining quiet (no talking or noises) for 80% of opportunities presented, over 3 consecutive weekly probes.  Given instruction using a handwriting program and a visual model of each targeted letter or number, Navy will neatly copy each letter or number attending to size, spacing and orientation within 1” blocks with a midline, with 80% accuracy of letters and numbers attempted. |
| Purple:  Given instruction within a small or large group setting, a visual picture cue, and an adult model, without verbal direction, Purple will follow the visual cues provided in order to modify his “listening manners” behavior by sitting appropriately on his chair, with quiet lips, quiet hands, quiet feet, eyes on speaker, and listening/following directions for 80% of opportunities presented over 3 consecutive weekly probes.  When participating in a group activity, or after he has completed an independent activity, and Purple wants to gain the attention of an adult, Purple will independently raise his hand to gain attention from an adult while remaining quiet (no talking or noises) for 80% of opportunities presented, over 3 consecutive weekly probes.  Given instruction using a variety of materials, including practice analog clock, the classroom clock, worksheets etc., Purple will independently and correctly tell time to the hour and half hour for 90% of opportunities presented over 3 consecutive weekly probes  Given instruction using a handwriting program and a visual model of each targeted letter or number, Purple will neatly copy each letter or number attending to size, spacing and orientation within 1” blocks with a midline, with 80% accuracy of letters and numbers attempted. |
| Black:  During naturally occurring situations throughout the day and in the event that a peer is engaging in a behavior that Black does not approve of, Black will focus on his own appropriate behaviors and the appropriate behaviors of his other peers by remaining quiet and engaged in the instruction/activity for 9/10 weekly opportunities.  During instructional and non-instructional time, when Black is required to sit and/or wait quietly (i.e. morning opening, deskwork, centers, transitions, etc.), Black will sit quietly without making loud noises/calling out for 15 minutes or 9/10 weekly opportunities.  During instructional time, Black will raise his hand and wait to be called on before answering a question for 9/10 weekly opportunities.  During group instruction and in the event that Black raises his hand to answer a question and another peer is called on, Black will accept this by sitting quietly and waiting for his turn to be called on for 9/10 weekly opportunities.  Throughout the day, during instructional/non-instructional time, when Black wants to gain the attention of an instructor, he will raise his hand quietly and wait to be called on for 9/10 weekly opportunities.  Given an analog clock or visuals of analog clocks (e.g. worksheets, pictures) and when asked, “What time is it? Black will correctly tell time to the hour for 90% of opportunities presented.  Given paper and a pencil, Black will improve handwriting skills by copying all upper and lowercase letters and numbers 0-10 with a concentration on appropriate formation AND letter-to-line orientation with 90% accuracy on each element on all letters and numbers attempted. |
| Yellow:  Throughout the day, Yellow will request items/activities she wants using a 2-word phrase (e.g. green skittle, doll please) for at least 10/10 items/activities.  When presented with an item that Yellow may or may not want, Yellow will say, “Yes” or “No” to accept or refuse the item for 10/10 opportunities presented.  During instructional time and when verbally given a 2-step direction (i.e. “walk t the door, knock 3 times”) , Yellow will follow the 2-step direction in the order it was given for 90% of all 2-step directions presented.  Throughout the entire day and when given a verbal direction and a visual prompt (e.g. picture, gesture) to transition, perform a task, etc. Yellow will follow each direction within 10 seconds with 100% accuracy of all directions given.  Given a model of each pre-writing stroke (horizontal line, vertical line, O, X, +, and /) and each uppercase letter, Yellow will trace each stroke and letter within ¼ inch of the model with 100% accuracy of all strokes/uppercase letters. |

**5. Materials Needed:**

* Bowl, plate, or baggy for each student
* Clock
* Observation handout for each student
* Coloring/drawing items for each student
* Snow

**6. Expectations for Behavior and Class Activities:**

* The child will follow teacher directions.
* The child will actively engage in all activities to her best ability.
* The child will treat others respectfully and courteously.
* The child will keep hands and feet to himself.
* The child will remain quiet and seated during the lesson.
* First and second grade student will use a quiet, raised hand to be called on during lesson.

**7. General or Specific Accommodations for Special Needs Learners:**

* + This is a classroom for students with autism, so many accommodations are already in place. Specific accommodations are in each child’s IEP; general accommodations include:
    - Frequent reinforcement using verbal praise or edible rewards.
    - Very low student-teacher ratio, with 2 paraprofessionals and 1 main teacher at the minimum for 8 students.
    - Separation by at least 2 peers for students who are learning to interact with each other.
    - Seating that allows all students in close proximity of the instructing teacher.
    - Differentiated objectives to allow for individualized goal acquisition.

**8. Description of Learning Activities**

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| **Lesson Implementation** |
| Introductory Activity:  The teacher should begin by reviewing the story read previously (The Snowy Day). Ideally, the students should be asked to describe what happened in the story. Then, the teacher should let the students know that today they will explore what happens to snowballs inside.  Note: If possible, have the students go outside to collect their own snowballs in bowls. If not snow may be pre-readied for each student.  Modeling/Demonstration:  Complete the handout with the class. For the first item show the class your snowball. Tell them that you are going to draw a picture of the snowball how it looks now. Allow the students to watch you. Once you are done, have one student working on a time objective look at the clock to see what time it is. Choose a student that will likely be competent figuring out the time.  Guided Practice and Feedback:  Now, have the students draw their own pictures of what their snowballs look like now. Try to make sure every student is drawing a picture (even if it is not quite perfect). After the drawings are done, remind the students of the time recorded earlier. Now, either write the number for the student to copy or trace, or tell the student the numbers to write for the time. At this point, also have students write their name on their handouts based on their individual handwriting goals (i.e. copy, trace, independently, etc.). Once all the fine motor skills have been used and drawings are complete, move the snowballs to a space near the heater. Now, discuss what the snow collecting experience was like. Talk about the conditions outside. Was it cold or hot? How did the snow feel? What was the weather? How did the snow get outside? The drawing and discussion should take about 15 minutes---just in time for the next drawing.  At the 15 minute mark (approximately), have a different student note what time it is now. Help students record this time in the “stage 2” area.  Modeling/Demonstration:  Once again model how to draw the next stage in the appropriate box.  Guided Practice and Feedback:  Have a new student note the time now, and as before facilitate fine motor and handwriting skills to have students produce the time on their handouts. Move the snowballs back near the students, and help the students to draw a picture of their observation in the box. Once the observations have been recorded, return the snowballs to the space near the heater. Have a discussion with the students about observations and why scientists need to record data. Explain that scientists need to write down what they see make discoveries.  Independent Practice/Exploring:  Repeat the above procedure for the next time point. (15 minutes later, 30 minutes from start) This time try to only assist with writing the time again based on the IEP stated needs (after having a new student determine the time) and then let them draw. If they need help, it can still be given; however, as little assistance as possible should be used. Instead, aim this time towards providing positive feedback and praise.  Now, wait for the snow to melt completely before the final observations. Students may have recess at this time where independent exploration with some snow brought inside in a tub may be allowed. This can assist students with making personal discoveries about the snow.  For the final observation, bring the students back together and have yet another student note the time. Again, assist students with recording the time on their sheets and try to minimally assist the students with their drawings as done for stage 3.  Formative Assessment:  Students should be mostly formatively assessed through discussion about the snow and scientific process, but also through their drawings. This is the first science lesson in this format, so it is expected that students will still be learning. Lessons using a similar format are included later in this lesson to help reteach and solidify learning of these concepts.  Students should also be formatively assessed on their handwriting for numbers and letters to note areas where generalization outside occupational therapy (OT) practice may need to be an item of greater focus.  Accommodations:  Younger students in this class have limited vocabulary. When verbal discussion is occurring, choices will be provided to allow ample participation by these students. For example when discussing the outside environment, a student might be asked to describe how it felt outside (the temperature). Choices might include hot or cold. These same students might have challenges with staying on task and drawing appropriately. Teachers should talk to them about what is happening to the snow, but may take pictures of their snowballs to be printed out and attached to the handout for later reference to help these students get the full experience out of this lesson.  Similarly, students have different ways they need to write based on their IEP goals and specifically designed instruction (SDI). Students MUST be equipped as determined by their IEP with pencil grips, writing grids, slant boards, or other appropriate accommodations for writing.  Blue’s objectives indicate he needs to practice writing sentences. Have a teacher dictate a sentence about Blue’s drawing after each observation for him to write on the lines under his observational handout.  Review and Preview:  After everyone is done drawing, allow students to share their observations—reminding them that communicating discoveries is an important part of the scientific process. Talk about what happened to the snow and why. Also, discuss how long the experiment took using the recorded times. Preview that tomorrow they will make a special kind of “snow” that they can keep inside. |

**9. Potential Areas of Difficulty with the Content and Correction Procedures:**

This lesson must occur over a long time interval, which requires prolonged attention. Students might be pulled to allow for breaks during the lesson or to work on ‘make up work’ as needed. In these ways, changes of attention can be built into the lesson to allow for optimal performance.

Some students are working on IEP objectives related to fine motor skills that do not necessary mirror the format of this lesson. In order to help them develop those academic skills in a multi-curricular setting inductive of generalization, targeting of objectives may be modified to include these goals. For example, Yellow’s objective for fine motor skills/handwriting does not yet include number writing. She will still trace numbers written by teachers on her handout in order to help her with general fine motor development.

**10. Summative Assessments:**

At the end of this unit, students will participate in a one-on-one student teacher interview. For this lesson, the following question will be included:

What happens when snow is brought inside? Answer: it melts

Students in this class are frequently being probed for all of their IEP objectives. They are assessed for each weekly. Below are sample weekly data collections for the IEP objectives included in this lesson for each student.

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| Pink:  During small or large group instruction, Pink will sit appropriately (keeping hands to herself, waiting to be called on before speaking, sitting up straight, etc.) for at least 10 minutes for 5/5n opportunities presented.   1. + - \_\_\_\_\_/10 min 2. + - \_\_\_\_\_/10 min 3. + - \_\_\_\_\_/10 min 4. + - \_\_\_\_\_/10 min 5. + - \_\_\_\_\_/10 min \_\_\_\_\_%   During instructional time (i.e. work centers, deskwork, etc.), Pink will increase appropriate behaviors (task completion without incident) by reducing escape related behaviors in the form of saying, “I can’t do it,” flipping through her materials, staring at the instructor to direct attention away from the task, etc. from a current rate of approximately 6 per week to 1 or less per week.  Weekly Total = \_\_\_\_\_\_\_\_\_\_\_\_  Given an analog clock with a specific time, Pink will tell time to the hour for 9/10 opportunities.   1. + - 6. + - 2. + - 7. + - 3. + - 8. + - 4. + - 9. + - 5. + - 10. + - \_\_\_\_\_\_%   Given instruction using a handwriting program, a small pencil (under 3” in length), and a visual model of each upper/lowercase alphabet letter and numbers 0-9, Pink will neatly copy each letter and number, with a concentration on correct formation with 80% accuracy.   1. + - 6. + - 2. + - 7. + - 3. + - 8. + - 4. + - 9. + - 5. + - 0. + - \_\_\_\_\_\_%   Note: Same list, but for letters for uppercase and lowercase letters.  Given instruction using a handwriting program, a small pencil (under 3” in length), and a visual model of her first name, Pink will copy her first name with a concentration on correct formation with 80% accuracy.  P i n k + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  P i n k + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  P i n k + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  P i n k + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  P i n k + - \_\_\_/\_\_\_ = Formation = \_\_\_\_% |
| Red:  During small group instruction and when no prompt is given, Red will remain seated with a quiet voice for 15 minutes for 4/5 weekly opportunities over 3 consecutive probes.   1. + - \_\_\_\_\_/15 min 2. + - \_\_\_\_\_/15 min 3. + - \_\_\_\_\_/15 min 4. + - \_\_\_\_\_/15 min 5. + - \_\_\_\_\_/15 min \_\_/5 = \_\_\_\_\_%   During work stations/centers, Red will remain engaged in the task for at least 5 minutes before taking a break for at least 8/10 weekly opportunities over 3 consecutive weekly probes.   1. + - \_\_\_\_\_/5 min 2. + - \_\_\_\_\_/5 min 3. + - \_\_\_\_\_/5 min 4. + - \_\_\_\_\_/5 min 5. + - \_\_\_\_\_/5 min \_\_/5 = \_\_\_\_\_%   Throughout the school day, and when an item/ activity is or is not present, Red will accurately request and item/activity (e.g. say, “skittle” instead of “green”) using a phrase consisting of 2 or more words for at least 10 different items/activities throughout the school week over 3 consecutive weekly probes.   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - 10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + - \_\_\_\_\_%   Given a written model of each capital letter and a pencil, Red will trace each letter within 1/4” of the model with correct formation with 80% accuracy of all letters presented over 3 consecutive weekly probes.   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | A. + - | J. + - | R. + - | Z. + - | a. + - | j. + - | r. + - | z. + - | | B. + - | K. + - | S. + - |  | b. + - | k. + - | s. + - |  | | C. + - | L. + - | T. + - |  | c. + - | l. + - | t. + - |  | | D. + - | M. + - | U. + - |  | d. + - | m. + - | u. + - |  | | E. + - | N. + - | V. + - |  | e. + - | n. + - | v. + - |  | | F. + - | O. + - | W. + - |  | f. + - | o. + - | w. + - |  | | G. + - | P. + - | X. + - |  | g. + - | p. + - | x. + - |  | | H. + - | Q. + - | Y. + - |  | h. + - | q. + - | y. + - |  |   \_\_\_\_\_\_% |
| Green:  During small/large group instruction in either the regular education or special education classroom, Green will remain on topic while contributing to the discussion (e.g. he will not bring up his dog while the group is discussing the weather, etc.) for 10/10 opportunities presented over 3 consecutive weekly probes.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  Given an analog clock Green will tell time to the five minutes for each 1 o’clock – 12 o’clock hour with 100% accuracy over 3 consecutive weekly probes.   1. 1:\_\_\_ + - 7. 7:\_\_\_ + - 2. 2:\_\_\_ + - 8. 8:\_\_\_ + - 3. 3:\_\_\_ + - 9. 9:\_\_\_ + - 4. 4:\_\_\_ + - 10. 10:\_\_\_ + - 5. 5:\_\_\_ + - 11. 11:\_\_\_ + - 6. 6:\_\_\_ + - 12. 12:\_\_\_ + - \_\_\_\_\_\_\_%   Given a pencil, a slant board and written model of his first and last name, Green will copy his first and last name with a concentration on both formation AND letter-to-line orientation with 100% accuracy for each criterion over 3 consecutive weekly probes.  G r e e n S t u d e n t + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  G r e e n S t u d e n t + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  G r e e n S t u d e n t + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  G r e e n S t u d e n t + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  G r e e n S t u d e n t + - \_\_\_/\_\_\_ = Formation = \_\_\_\_%  Given a pencil, a slant board, and lined paper with a written model of each uppercase and lowercase letter, Green will copy each letter with a concentration on formation and letter-to-line orientation with 80% accuracy for each of the criterion over 3 consecutive weekly probes.   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | A. + - | J. + - | R. + - | Z. + - | a. + - | j. + - | r. + - | z. + - | | B. + - | K. + - | S. + - |  | b. + - | k. + - | s. + - |  | | C. + - | L. + - | T. + - |  | c. + - | l. + - | t. + - |  | | D. + - | M. + - | U. + - |  | d. + - | m. + - | u. + - |  | | E. + - | N. + - | V. + - |  | e. + - | n. + - | v. + - |  | | F. + - | O. + - | W. + - |  | f. + - | o. + - | w. + - |  | | G. + - | P. + - | X. + - |  | g. + - | p. + - | x. + - |  | | H. + - | Q. + - | Y. + - |  | h. + - | q. + - | y. + - |  |   \_\_\_\_\_\_% |

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| Blue:  Throughout the day, when a peer asks Blue a question, Blue will answer their question within 5 seconds for 9/10 opportunities present over 3 consecutive weekly probes.   1. \_\_\_\_ sec + - 6. \_\_\_\_ sec + - 2. \_\_\_\_ sec + - 7. \_\_\_\_ sec + - 3. \_\_\_\_ sec + - 8. \_\_\_\_ sec + - 4. \_\_\_\_ sec + - 9. \_\_\_\_ sec + - 5. \_\_\_\_ sec + - 10. \_\_\_\_ sec + - \_\_\_\_\_%   When provided with a “question card” or a verbally prompted question, Blue will ask his peer a question and report the answer back to the instructor for 9/10 opportunities over 3 consecutive weekly probes.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  During instruction time, and when asked at least 20 “how” questions, Blue will answer the “how” question or 20/20 questions over 3 consecutive weekly probes.   1. + - 6. + - 11. + - 16. + - 2. + - 7. + - 12. + - 17. + - 3. + - 8. + - 13. + - 18. + - 4. + - 9. + - 14. + - 19. + - 5. + - 10. + - 15. + - 20. + - \_\_\_\_%   Throughout the school day (task demand, transitions, preferred activities, etc.), Blue will continue to improve appropriate behaviors (i.e. squeezing head or hands) by decreasing the number of times he hits the sides of his head/bangs his head, from a current rate of 230 per week to 5 or less per week over 5 consecutive weekly probes. \_\_\_\_\_/week  During group instruction (e.g. Morning Opening/Circle), Blue will independently ask for a break or remove himself from the group quietly and calm down for 90% of opportunities present throughout the school week over 3 consecutive weekly probes.  1 2 3 4 5 6 7 8 9 10 + - \_\_\_\_\_%  Note: Probes taken from first 10 opportunities presented.  Given 3 dictated sentences (based on story summarization objective), Adam will write down the sentence as it is being dictated concentrating on proper capitalization with at least 80% accuracy of all letters written within the 3 sentences over 3 consecutive weekly probes.  Capitalization: \_\_\_\_\_\_\_% |

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| Navy:  Given instruction using a variety of materials, including practice analog clock, the classroom clock, worksheets etc., Navy will independently and correctly tell time to the hour and half hour for 90% of opportunities presented over 3 consecutive weekly probes.   1. 1:\_\_0 + - 7. 7:\_\_0 + - 2. 2:\_\_0 + - 8. 8:\_\_0 + - 3. 3:\_\_0 + - 9. 9:\_\_0 + - 4. 4:\_\_0 + - 10. 10:\_\_0 + - 5. 5:\_\_0 + - 11. 11:\_\_0 + - 6. 6:\_\_0 + - 12. 12:\_\_0 + - \_\_\_\_\_%   Given instruction within a small or large group setting, a visual picture cue, and an adult model, without verbal direction, Navy will follow the visual cues provided in order to modify his “listening manners” behavior by sitting appropriately on his chair, with quiet lips, quiet hands, quiet feet, eyes on speaker, and listening/following directions for 80% of opportunities presented over 3 consecutive weekly probes.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  When participating in a group activity, or after he has completed an independent activity, and Navy wants to gain the attention of an adult, Navy will independently raise his hand to gain attention from an adult while remaining quiet (no talking or noises) for 80% of opportunities presented, over 3 consecutive weekly probes.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  Given instruction using a handwriting program and a visual model of each targeted letter or number, Navy will neatly copy each letter or number attending to size, spacing and orientation within 1” blocks with a midline, with 80% accuracy of letters and numbers attempted.   1. + - 6. + - 2. + - 7. + - 3. + - 8. + - 4. + - 9. + - 5. + - 0. + - \_\_\_\_\_\_%   Note: Same list, but for letters for uppercase and lowercase letters. |

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| Purple:  Given instruction within a small or large group setting, a visual picture cue, and an adult model, without verbal direction, Purple will follow the visual cues provided in order to modify his “listening manners” behavior by sitting appropriately on his chair, with quiet lips, quiet hands, quiet feet, eyes on speaker, and listening/following directions for 80% of opportunities presented over 3 consecutive weekly probes.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  When participating in a group activity, or after he has completed an independent activity, and Purple wants to gain the attention of an adult, Purple will independently raise his hand to gain attention from an adult while remaining quiet (no talking or noises) for 80% of opportunities presented, over 3 consecutive weekly probes.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  Given instruction using a variety of materials, including practice analog clock, the classroom clock, worksheets etc., Purple will independently and correctly tell time to the hour and half hour for 90% of opportunities presented over 3 consecutive weekly probes.   1. 1:\_\_0 + - 7. 7:\_\_0 + - 2. 2:\_\_0 + - 8. 8:\_\_0 + - 3. 3:\_\_0 + - 9. 9:\_\_0 + - 4. 4:\_\_0 + - 10. 10:\_\_0 + - 5. 5:\_\_0 + - 11. 11:\_\_0 + - 6. 6:\_\_0 + - 12. 12:\_\_0 + - \_\_\_\_\_%   Given instruction using a handwriting program and a visual model of each targeted letter or number, Purple will neatly copy each letter or number attending to size, spacing and orientation within 1” blocks with a midline, with 80% accuracy of letters and numbers attempted.   1. + - 6. + - 2. + - 7. + - 3. + - 8. + - 4. + - 9. + - 5. + - 0. + - \_\_\_\_\_\_%   Note: Same list, but for letters for uppercase and lowercase letters. |

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| Black:  During naturally occurring situations throughout the day and in the event that a peer is engaging in a behavior that Black does not approve of, Black will focus on his own appropriate behaviors and the appropriate behaviors of his other peers by remaining quiet and engaged in the instruction/activity for 9/10 weekly opportunities.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  During instructional and non-instructional time, when Black is required to sit and/or wait quietly (i.e. morning opening, deskwork, centers, transitions, etc.), Black will sit quietly without making loud noises/calling out for 15 minutes or 9/10 weekly opportunities.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  During instructional time, Black will raise his hand and wait to be called on before answering a question for 9/10 weekly opportunities.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  During group instruction and in the event that Black raises his hand to answer a question and another peer is called on, Black will accept this by sitting quietly and waiting for his turn to be called on for 9/10 weekly opportunities.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  Throughout the day, during instructional/non-instructional time, when Black wants to gain the attention of an instructor, he will raise his hand quietly and wait to be called on for 9/10 weekly opportunities.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  Given an analog clock or visuals of analog clocks (e.g. worksheets, pictures) and when asked, “What time is it? Black will correctly tell time to the hour for 90% of opportunities presented.   1. 1:\_\_0 + - 7. 7:\_\_0 + - 2. 2:\_\_0 + - 8. 8:\_\_0 + - 3. 3:\_\_0 + - 9. 9:\_\_0 + - 4. 4:\_\_0 + - 10. 10:\_\_0 + - 5. 5:\_\_0 + - 11. 11:\_\_0 + - 6. 6:\_\_0 + - 12. 12:\_\_0 + - \_\_\_\_\_%   Given paper and a pencil, Black will improve handwriting skills by copying all upper and lowercase letters and numbers 0-10 with a concentration on appropriate formation AND letter-to-line orientation with 90% accuracy on each element on all letters and numbers attempted.   1. + - 6. + - 2. + - 7. + - 3. + - 8. + - 4. + - 9. + - 5. + - 0. + - \_\_\_\_\_\_%   Note: Same list, but for letters for uppercase and lowercase letters. |
| Yellow:  Throughout the day, Yellow will request items/activities she wants using a 2-word phrase (e.g. green skittle, doll please) for at least 10/10 items/activities.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  When presented with an item that Yellow may or may not want, Yellow will say, “Yes” or “No” to accept or refuse the item for 10/10 opportunities presented.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  During instructional time and when verbally given a 2-step direction (i.e. “walk t the door, knock 3 times”) , Yellow will follow the 2-step direction in the order it was given for 90% of all 2-step directions presented.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  Throughout the entire day and when given a verbal direction and a visual prompt (e.g. picture, gesture) to transition, perform a task, etc. Yellow will follow each direction within 10 seconds with 100% accuracy of all directions given.  1. + - 6. + -  2. + - 7. + -  3. + - 8. + -  4. + - 9. + -  5. + - 10. + - \_\_\_\_\_\_%  Given a model of each pre-writing stroke (horizontal line, vertical line, O, X, +, and /) and each uppercase letter, Yellow will trace each stroke and letter within ¼ inch of the model with 100% accuracy of all strokes/uppercase letters.   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | A. + - | J. + - | R. + - | Z. + - | a. + - | j. + - | r. + - | z. + - | | B. + - | K. + - | S. + - |  | b. + - | k. + - | s. + - |  | | C. + - | L. + - | T. + - | |. + - | c. + - | l. + - | t. + - | X. + - | | D. + - | M. + - | U. + - | /. + - | d. + - | m. + - | u. + - | O. + - | | E. + - | N. + - | V. + - | +. + - | e. + - | n. + - | v. + - | —. + - | | F. + - | O. + - | W. + - |  | f. + - | o. + - | w. + - |  | | G. + - | P. + - | X. + - |  | g. + - | p. + - | x. + - |  | | H. + - | Q. + - | Y. + - |  | h. + - | q. + - | y. + - |  |   \_\_\_\_\_\_% |

**11. Reflections**: For today’s lesson, I had students yellow, red, black, blue, navy, and purple. This made it much easier to engage all students. Having real snow that the students could touch indoors really helped keep all students involved. Unfortunately, the handout was a major challenge for some students. I need to modify the handout more for different ages. In the next observation lesson, I will have pictures of the stages for younger students to paste rather than draw. I will keep the individualization of the name writing, but make it more embedded. I think that the observation recording is a very important element of scientific skills and really hones in on the “science as inquiry” process found in the PA standards. As such, I find the handout to be a vital element of the lesson even if it poses a challenge to students’ learning.

I needed to be more flexible with this lesson as I was able to do while the lesson progressed. At first, I didn’t want the students to play with the snow inside because I thought it would be too messy. It turned out that this was not needed. It was messy, but it didn’t matter. The kids really enjoyed it, and learned more by interacting fully with the snow. In future lessons I will just be ready for a mess and deal with it as it comes.

**12. Sources:**

**Snow Observation**

**NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Watch what happens to your snowball over time. Draw a picture to show the snowball at each state.**

1. **SNOWBALL BASELINE (start) - COPY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TIME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **SNOWBALL STAGE 1 (15 minutes from start) - COPY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TIME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **SNOWBALL STAGE 2 (30 minutes from start) - COPY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TIME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **SNOWBALL FINSIHED (45+ min - at melt) - COPY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TIME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Snow Observation (key)**

**Watch what happens to your snowball over time. Draw a picture to show the snowball at each state.**

1. **SNOWBALL BASELINE (start) - TIME: \_\_\_12:00\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **SNOWBALL STAGE 1 (15 minutes from start) - TIME: \_\_\_12:15\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. **SNOWBALL STAGE 2 (30 minutes from start) - TIME: \_\_\_12:30\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **SNOWBALL FINSIHED (45+ minutes from start - at melt) - TIME: \_\_\_2:00\_\_\_\_\_\_\_**