

OBSERVATION SHEET

for the STEAM approach

to working with LEGO DUPLO construction material

Observations

Child's name:

Age:

Number in the team:

Teacher:

Date:, Time:

Monitoring indicators

Execution of model building instructions

- Independently, without help from another child/teacher.
- With a little help from another child/teacher.
- With significant help from another child/teacher.
- Unable to follow instructions without assistance.
- The child pays attention to details when building the model. (For example: distance between bricks on the large green base-plate).

Problem solving

- Starts work on the model independently (indication of initiative).
- Does not give up if the indicated result is not achieved, but starts from the beginning, dismantling what has been done so far (an indication of the search for a new approach).
- Gives up if the indicated result is not immediately achieved (indication of lack of perseverance and tenacity).
- Completes the pattern being worked on (an indication of tenacity and ability to see a task through to completion).
- Consults other children on problems encountered in building the model and how to overcome them (an indication of seeking problem-solving strategies).

Creativity

- Combines colors and/or brick shapes appropriately.
- Tends to invent stories related to the model created.
- Willingly explains the purpose of the model.
- NOT willing to discuss the model they built.
- Adapts the construction of the model to the bricks available.

Team work

- Assists other children in the team in completing the work.
- Works independently on the model, not allowing other children to join in.
- Refuses help from other children or the teacher.
- Accepts the role in the team assigned by the other children/teacher when apportioning work required on the topic.

- Does NOT accept the role in the team assigned by the other children/teacher when apportioning work required on the topic.
- Listens to other children/teacher when of disagreements arise in the process of the work.
- Accepts suggestions for changes in the pattern made by other children/teacher.
- Does NOT accept suggestions for changes in the pattern made by other children/teacher.
- Shares ideas with the other children for improving the overall work on the subject.

Communication

- Initiates conversations with other children when working on the topic (indication of seeking communication).
- Joins in the conversation between the children in the team on own initiative.
- Does NOT join the conversation between the children in the team unless specifically asked for their opinion.
- Responds willingly to questions posed by the other children/teacher.
- Does NOT respond willingly to questions posed by the other children/teacher.
- Uses simple sentences, sometimes just words, when talking to other children/teacher.
- Uses explanatory sentences with a wide vocabulary.
- Listens to the other children engaged in the conversation (indication of interest and tolerance for the opinions of others).
- Knows when and how to ask the teacher a question during the lesson.
- Does NOT follow the normal rules for asking questions of the teacher during class.
- Uses appropriate non-verbal communication when working with other children – gestures, facial expressions, sharing work space and construction materials.

STEAM activities

- Explains the experiment being conducted with the model.
- Makes an independent analysis of the results of the experiment.
- Formulates independently one or more conclusions from the experiment.
- Formulates a conclusion from the experiment with guidance from the teacher.
- Can NOT formulate a conclusion from the experiment even with help from the teacher.
- Makes the connection between inferences from experiments to real life and can list one or more specific examples.