Ministry of Education of the Republic of Sakha ( Yakutia )

State autonomous institution

additional education in the Republic of Sakha ( Yakutia )

"Recreation and Health Center for Children" Sosnovy Bor "

Preschool educational institution " Lingua "

Approved at PS

Protocol # \_\_\_\_\_\_\_\_\_\_\_\_\_\_

from " \_ \_ " \_ \_\_\_\_\_\_\_\_\_\_\_20 20 g .

Additional educational

program

**on preschool education**

**" LEGO construction"**

Age - from 4 to 5 years

Compiled by : teacher

                                     additional education

       Apollon Aprosimov

g . Yakutsk 20 20 g of .

1. **EXPLANATORY NOTE**

                  At present, significant changes are taking place in the preschool education system . The success of these changes is associated with the renewal of the scientific , methodological and material base of training and education . One of the important conditions for updating is the use of **LEGO technologies .**Using LEGO- designers in the educational work with children serves the best means of developing skills constructively - gaming activities and the criterion of psychophysical development of children of preschool age , including the formation of such important components of activity , as the ability to set a goal , choose medium -OPERATION to achieve it , make an effort to exact correspondence of the obtained result with the intention .

                   **Relevance :**

Are an excellent tool for the intellectual development of preschoolers , ensuring the integration of educational areas ( social and communicative development , cognitive development , speech development , artistic, aesthetic and physical development );

Allow the teacher to combine education , upbringing and development of preschoolers in the game mode ( learn and learn in the game );

Form a cognitive activity , contributes to the education of socially - active person , creates communication skills and co-creation ;

Combine play with exploratory and experimental activities , provide the child with the opportunity to experiment and create his own world , where there are no boundaries .

  **Goal :**purposeful introduction of LEGO design and robotics into the educational process of the preschool educational institution .

**W Tasks in the second year of study (children 4-5 years)**:

- W Freeze panes acquired in younger skill group;
- P azvivat observation, clarify ideas about the shape of objects and their often ̆, their spatial arrangement, otnositelnoi ̆ magnitude differences and similarities;
- n Continually introduce new parts;
- Z nakomit with Lego - the constructor ;
- We chit to work with small details;
- With ozdavat more complex construction ;
- We chit talk about the construction of the other students, on their own allocation of responsibilities;
- To make the structure according to the drawings without relying on the sample;
- F normed ability to convert the design in accordance with predetermined conditions;

- H apravlyat child's imagination to create new and original designs.

**K Alendarno - thematic planning**

**lessons on the educational program for " LEGO - construction"**

**for the middle group - 20 20 -202 1 in . g .**

**(1 hour per week )**

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| --- | --- | --- | --- | --- |
| **№ p / p** | **Section** | **Description** | **date** | **Number of hours** |
| **1 semester** |
| 1 | Design by pattern and pattern transformation by conditions | Consideration of the object. Detail color ̆. Calling Detail ̆ Lego - designer. Establishing the spatial location of part ̆ of the building .  |   |   |
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| 2 | Conditional design | Determination of the conditions that the building must meet . Analysis of conditions. Practical activities.  |   |   |  |
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| **2 semester** |  |
| 3 | Design by design | Thinking over the topic of the future ̆ construction . Drawing up a general description of the future product. Mastering the concept development plan. Comparison of the resulting ̆ building with the conceived ̆.  |   |   |  |
| 4 | Design according to the simplest drawings and visual diagrams | Consideration of the scheme. Recreation of external and individual functional features of объектов real objects.  |   |   |  |

**Content of the program**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **№ n / n** | **Theme****lessons** | **Objectives and****tasks****lessons** | **Activity content** | **Key****competence** | **Clock** |
| **1 semester** |
| 1 | Hello , Lego , we missed | Introduce a new set of Lego - constructor a   | Repetition of the material passed in the younger group: name of the part ̆ constructor, methods of fastening the part ̆. " Find the part the same as on the card." Pondering the future ̆ construction . Design by design.  | Social    Information    Communicative     | 1 |
| 2 | Zoo | Develop the cognitive interest of children ;To foster a respect for human labor . | Conversation "What is a zoo?" Problem situation: all the animals left their cages and are walking around the zoo. Physical education. Construction of houses and fences for beast ̆ (in conception). Children's story ̆ about buildings . Outplaying.  | Social    Information    Communicative                       | 1 |
| 3 | Elephant | Learn to build an elephant | Elephant riddle. An animal story with an examination of animal illustrations. Design by pattern. Children's story ̆ about buildings .  | Information    Social      | 1 |
|  4 |  Giraffe | Learn to build a giraffe | Riddles about the giraffe. Giraffe presentation. Physical education. Demonstration of the sample. Design by pattern. Accommodation of animals in the zoo. | Information    Social     | 1 |
| five | Aviary for tigers and lions | Teach everyone to build one craft together | Design by schemes. Mutual evaluation of work (children change schemes with each other and check the building .). Playing buildings.  | Information    Social     | 1 |
| 6 | Crocodile | Learn to build a crocodile | Continue introducing the zoo  | Information    Social     | 1 |
| 7 | Ducklings in the lake | Learn to work with instructions | Build ducklings from the constructor | Information    Social     | 1 |
| eight | Bridge over the river | Learn to work with instructions | Learn to build a bridge, precisely connect building parts | Information    Social     | 1 |
| nine | Design by design  | Develop creativity and self- st | Strengthen the acquired skillsLearn to think about the content of the future building in advance, name its theme, give a general description.  | Information    The activity     | 1 |
| ten | Build a corral for cows | Encourage children to independently select the necessary parts in accordance with the nature of the building and to carry out the building according to the model of the teacher . | Reinforce the concepts of "high", "low"Learn to complete tasks according to conditionsDevelop creativity, imagination, fantasy | Information    The activity     | 1 |
| eleven | Truck | Highlight main parts and details  | Learn to create the simplest model of a truck  | Information    The activity    Social     | 1 |
| 12 | Farmer's house | Learn to build structures with ceilings.Introduce the concept of "foundation" | Form a generalized idea of ​​houses . Make them strong Develop the ability to highlight parts  | Information    The activity    Social     | 1 |
| 13 | Vehicle with trailer | Teach children to choose the right parts for construction correctly. Choosing the desired shape and size | Learn to build a car with a trailerDevelop design skills  | Communicative    The activity      | 1 |
| fourteen | Design by design  | Teach children to choose the right parts for construction correctly. Choosing the desired shape and size | Strengthen the acquired skillsLearn to think about the content of the future building in advance, name its theme, give a general description.  | Communicative    The activity     | 1 |
| fifteen | D omashnie animals. Cat  | Teach children to choose the right parts for construction correctly. Choosing the desired shape and size | Presentation "Pets". Riddle about a cat. Design according to the scheme.  | Communicative    The activity     | 1 |
| sixteen | Cow  | Teach children to choose the right parts for construction correctly. Choosing the desired shape and size | A story about a pet - a cow, viewing illustrations. Sample analysis. Design by pattern. Building story .  | Communicative    The activity     | 1 |
| 17 | Birds ̆ yard  | The world of man. Acquaintance with the objects of the surrounding man-made world. | Conversation about wild and domestic birds. Designing birds according to schemes.  | The activity    Informative    Communicative     | 1 |
| 18 | Design by design  | Learn to build the simplest buildings of different sizes. Build a stable structure | Discussion of the future ̆ construction . Construction in pairs. Exhibition of works. Playing buildings.  | The activity    Informative    Communicative     | 1 |
| nineteen | Ship | Develop an interest in lightweight construction | Tell about ships  | The activity    Informative    Communicative     | 1 |
| 20 | Aircraft  | Develop an interest in lightweight construction | A story about air transport and the profession of a pilot. Examination of illustrations with images .Construction. | The activity    Informative    Communicative     | 1 |
| 21 | Bus | Develop the ability to recognize things, and identify its qualities.  | A story about on land transport and the profession of a driver . Examination of illustrations with images .Construction. | The activity    Social    Communicative    Information     | 1 |
| 22 | Design by design  | Learn properly with ootnosit size s   buildings . | Pondering the future ̆ construction . Construction. Free play activity.  | The activity    Social    Communicative    Information | 1 |
| 23 | Rocket | Continue teaching children how to create simple buildings. | Tell about spaceLearn to build a rocket | The activity    Social    Communicative    Information | 1 |
| 24 | Lunar rover | Continue teaching children how to create simple buildings. | Tell about the lunar roverLearn to build from designer parts | The activity    Social    Communicative    Information     | 1 |
| 25 | Design by design  | To form the ability to generalize and compare objects in size, to navigate in basic colors; | Pondering the future ̆ construction . Design by design. Free game activity detei ̆. Playing buildings.  | The activity    Social    Communicative    Information     | 1 |
| 26 | Traffic light, traffic controller  | Continue teaching children how to create simple buildings. | Conversation "Rules of the road". Traffic light history. Design by pattern.A story about their buildings .  | The activity    Social    Communicative    Information     | 1 |
| 27 | Maze  | Consolidate the acquired skills. To teach to think in advance about the content of the building, to name its theme, to give a general description. | Problem situation: Masha has lost her bear cub and cannot find it in any way . Conditional construction. ... | The activity    Communicative    Informative     | 1 |
| 28 | Free play activity   | Consolidate the acquired skills. To teach to think in advance about the content of the building, to name its theme, to give a general description. | Games "Whose team will build faster", "Lay out the details in places", "Assemble the model by landmarks." Design by design. Playing buildings.... | The activity    Communicative    Informative     | 1 |
| 29 | Free play activity  | Consolidate the acquired skills. To teach to think in advance about the content of the building, to name its theme, to give a general description. | Games "Whose team will build faster", "Lay out the details in places", "Assemble the model by landmarks." Design by design. Playing buildings.  | The activity    Communicative    Informative     | 1 |
| thirty | "We will build a house in the forest" Repetition | Strengthen the ability to build a house, work collectively on one building | Develop children's creative imagination, teachimitate the sounds and movements of characters (bear, fox, hare). Learn to build a house. | The activity    Communicative    Informative     | 1 |
| 31 | Final lesson "From Concept to Implementation." Exhibition of works  | Consolidate the acquired skills. To teach to think in advance about the content of the building, to name its theme, to give a general description. | Repeat and fix the passed material: name of the part ̆ Lego constructors , methods of fastening the part ̆, design according to the conditions, instructions, sample, scheme.  | The activity    Communicative    Informative     | 1 |

**Assessment of the quality of mastering the program :**

Quality assessment consists in the analysis of children's work by a teacher with children .

**Expected result of the program implementation :**

- There will be an interest in the independent production of buildings , the ability to apply the knowledge gained in the design and assembly of structures , cognitive activity , imagination , fantasy and creative initiative .

- Design skills and skills , the ability to analyze an object , highlight its characteristic features , main parts , establish a connection between their purpose and structure will be formed .

- The communication skills of children are improved when working in pairs , in a team , in the distribution of responsibilities .

- The prerequisites for educational activities will be formed : the ability and desire to work , perform tasks in accordance with the instructions and the set goal , bring the work started to the end , plan future work .

**Literature :**

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**Исходный текст**