



Giant coordinate system

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RELATED SUBJECTS	GRADE RECOMMENDATIONS	TOTAL ACTIVITY TIME	LEARNING OBJECTIVES DURING THE LESSON SUBJECT-SPECIFIC COMPETENCIES	LEARNING OBJECTIVES AFTER THE LESSON
Mathematics, Arts, Social studies (← teamwork)	year 5	30-40 minutes	using coordinate systems, plotting points, organising teamwork	thanks to the activity, maybe a longer-lasting knowledge of coordinate systems, team skills improved

OVERVIEW: TOPIC & PURPOSE

Practicing plotting points in a coordinate system, creating mathematical art, team building.

ACTIVITY PREREQUISITES

Coordinate system



STEAM ELEMENTS

ELEMENT 1: context presentation	Defining a place in 2D
ELEMENT 2: creative design	Decorating the school entrance hall
ELEMENT 3: emotional and social learning	Working in teams, organising who does what and in which order.





STEAM SUBJECT ELEMENTS

STEAM SUBJECTS	SCIENCE	TECHNOLOGY	ENGINEERING	ARTS	MATHEMATICS
SHORT INTRODUCTION TO RELATED SUBJECT ELEMENTS				The created artefact decorates the entrance hall for a few days.	Coordinate system

SYLLABUS

LESSONS	SUBJECTS	TOPIC OF THE UNIT	LEARNING OBJECTIVES DURING THE LESSON: SUBJECT SPECIFIC COMPETENCIES	LEARNING OBJECTIVES AFTER THE LESSON: STEAM COMPETENCIES
1	Mathematics	coordinate system	plotting points	orientation in 2D





INSTRUCTIONAL PLAN BY LESSON (COPY AS MANY TIMES AS NEEDED)

LESSON

TIME PLAN	TEACHING & LEARNING ACTIVITIES	MATERIALS	LEARNING OBJECTIVES
INTRODUCTION (10 minutes)	revising the axes, coordinates, explaining the task, forming groups		
LEARNING ACTIVITIES (35 minutes)	the first two groups prepare the axes, then each group gets the coordinates of 3-4 points to find and join by sticking paper tape onto the floor	paved floor, paper tape, a task sheet with the points	working in teams, organizing the teamwork, plotting the points
WRAP-UP & EVALUATION (5 minutes)	discussing how they managed in the group, photo shooting, writing a short text for the school homepage	camera, sg to write on/with	evaluating teamwork, writing a short entry

EVALUATION PLAN BY LESSON

LESSON	EVALUATION CRITERIA	EVALUATION METHOD
1	E.g. Does the student understand / know ... ?	E.g. Making concept map
	E.g. Did the student make ... ?	E.g. Observation, comparing products
	E.g. Is the student able to present ... ?	E.g. Observation, peer-review of presentation materials
	E.g. Is the student able to implement ... ?	E.g. Creating a project for recontextualizing and adapting the idea





E.g. Did the students cooperate ...?

E.g. Observation, self-evaluation of groups / students.

NOTES

Below, you can see an example. You can be creative and make another form. A fish, a rabbit,...

ACTIVITY SHEETS TO BE LINKED



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Group: 1

A(1;0)·B(9;0)·C(9;6)·D(5;9)·E(1;6)·join-with·A

Group: 2

A(3;0)·B(5;0)·C(5;4)·D(3;4)·join-with·A

Group: 3

A(6;4)·B(8;4)·C(8;6)·D(6;6)·join-with·A

Group: 4

A(8;6,5)·B(8;8,5)·C(7;8,5)·D(7;7,5)

EVALUATION MATERIALS TO BE LINKED

Optional

REFERENCES / SUPPORTING MATERIALS TO BE LINKED

Optional - Additional information for teachers to refer to.

