## Neptune Township Public Schools Neptune Middle School LESSON PLANS

Department: Science
Grade Level: 8
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Monday	Blocks1B and5B (Full Blocks)
	Objective: SWBAT identify and explain that organisms reproduce, develop and have predictable life cycles. SWABAT explain that multicellular organisms are organized in structure and proportion.  NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1
	Do Now: Write the statement of cell theory that explains cell reproduction. (All cells come from pre-existing cells)
	Activities:
	Power Point lecture/discussion on mitosis and meiosis
	<ul> <li>Brief YouTube viewing of mitosis happening in a plant cell and in an animal cell.</li> <li>Exit ticket</li> <li>Assessment:</li> </ul>
	Closure: Exit Ticket "List the stages of mitosis in the correct sequence."  Homework: n/a

Monday	Blocks _1A_and 5A , (Mini Blocks)
	Objective: SWBAT explain that multicellular organisms are organized in structure and
	proportion.
	NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1
	NJCCCS: 1.1.8.D.1
	CCS: 6.RP.Al, 6.RP.A.3
	Activities:
	• Students were directed to a microscope with a prepared slide under it and required to diagram what they see.
	• Students were then directed to observe the slide on the microscope stage with their naked eye and respond to what they see when asked.
	• Students were then directed to identify an activity that they have participated in during this class in the past that is similar to today's activity. (observing lettuce and onion cells under the microscope and drawing a diagram of what they saw.)
	Students then discussed how the magazine photos under the microscope and the

magazine photos with the naked eye were similar to the viewing of the lettuce leaf

- Power Point Lecture/discussion on pointillism
- Students discussed the connection between pointillism and multicellular organism organization through proportion and ratio
- Students began working in groups to reconstruct a multicellular organisms using
  the pointillism technique identifying the individual points as cells; the individual
  portion they were working on was a tissue; and when the group placed the
  individual tissue pieces together making an organ/organ system depending on the
  original picture.

Assessment: ratios and proportions (parts of a whole) and multicellular organization i.e. cells yield tissues; tissues yield organs; organs work together to make organ systems.

Homework :n/a

Tuesday	Blocks _lB and5B (Full Blocks)
	Objective: SWBAT identify and explain that organisms reproduce, develop and have predictable life cycles. SWABAT explain that multicellular organisms are organized in attructure and proportion
	structure and proportion.  NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1
	Do Now: Write the statement of cell theory that explains cell reproduction. (All cells come from pre-existing cells)
	Activities:  • Power Point lecture/discussion on mitosis and meiosis  • Brief YouTube viewing of mitosis happening in a plant cell and in an animal cell.  • Exit ticket  Assessment:
-	Closure: Exit Ticket "List the stages of mitosis in the correct sequence."  Homework: n/a

Tuesday	Blocks _IAand SA (Mini Blocks)
	Objective: SWBAT explain that multicellular organisms are organized in structure and
	proportion.
	NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1
	NJCCCS: 1.1.8.D.1
	CCS: 6.RP.A1, 6.RP.A.3
	Activities:
	Students continued work on their pointillism organ/organ system pieces
	Assessment: n/a

Wednesday .	Blocks · IB and 5B (Full Blocks) . ·
	Objective: SWBAT identify and explain that organisms reproduce, develop and have predictable life cycles. SWABAT explain that multicellular organisms are organized in structure and proportion.
	NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1
	Activities:  • Lecture/discussion of cell changes during the specific phases of mitosis  • Students used their notes to complete a graphic organizer explaining the specific phases of mitosis and diagrammed the changes of specific cell parts during the phases
	Assessment: graphic organizer  Homework: n/a

Wednesday	Blocks _1B and SB (Mini Blocks)
	Objective: SWBAT explain that multicellular organisms are organized in structure and proportion.  NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1  NJCCCS: 1.1.8.D.1  CCS: 6.RP.Al, 6.RP.A.3
	Activities: Students continued work on their pointillism pieces.
	Homework : n/a

Thursday	Blocks1A and5A (Full Blocks)
	Objective: SWBAT identify and explain that organisms reproduce, develop and have predictable life cycles. SWABAT explain that multicellular organisms are organized in structure and proportion.
	NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1

Activities:

- Do Now: Complete the T-Chart graphic organizer contrasting Mitosis and Meiosis
- Oral review and discussion of Do Now
- Completion of Mitosis vs. Meiosis review packet

Assessment: Oral Review and discussion of review packet of Mitosis vs. Meiosis

Homework: n/a

Thursday	BlockS . IB and SB (Mini Blocks)
	Objective: SWBAT explain that multicellular organisms are organized in structure and
	proportion. NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1
1	NJCCCS: 1.1.8.D.1
	CCS: 6.RP.Al, 6.RP.A.3
	Activities: Students continued work on their pointillism pieces.
	Homework : n/a

Friday	Blocks IA 5A _ (Full Blocks)
	Objective: SWBAT identify and explain that organisms reproduce, develop and have
	predictable life cycles. SWABAT explain that multicellular organisms are organized in
	structure and proportion.
	NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1

Weekly Quiz
Closure: n/a
Homework : n/a

Friday	Blocks 1B and 5B (Mini Blocks)
	Objective: SWBAT identify and explain that organisms reproduce, develop and have
	predictable life cycles. SWABAT explain that multicellular organisms are organized in structure and proportion.
	NJCCCS: 5.1, 5.3, 5.3.A.1, 5.3.8.A.2, 5.3.8.D.1
	Weekly Quiz
	Closure: n/a
	Homework : n/a