Teacher: Rachel Wraley	Lesson # in Unit: 1	Lesson Topic: Exponential Functions
Lesson Objective and Assessment of By the end of the lesson, students wi	f <u>Objective</u> ill be able to: Write a function rule for an E	xponential Function.
Content Objectives: Recognize ex	sponential patterns using graphs and tables.	Compare Linear and Exponential Functions

Academic Language Objectives: Important vocabulary for the lesson: Linear function, Exponential function, y-intercept,

# Why does this lesson matter?

Exponential functions are used in several professions/disciplines (mainly scientific) all over the world. It is important to be able to recognize exponential patterns and write exponential functions in order to be successful in those professions/disciplines.

Assessment Statement: How will students show they have met the objective?

asymptote, constant, rate of change, common difference, and common multiplier

- Distinguish between situations that can be modeled with linear functions and with exponential functions. Understand that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. Compare linear functions and exponential functions that model real-world situations using tables, graphs, and equations. (AI.QE.1)

representations and interpret the values of a and b. (AI.QE      Graph exponential and quadratic equations in two variables  Type of Mathematical Knowledge Objective is seeking to measure Declarative  Procedural Conceptual  Standards for Mathematical Practices	es with and without technology. (A1.QE.3)
<ul> <li>☑Make sense of problems and persevere in solving them.</li> <li>☑Reason abstractly and quantitatively.</li> <li>☐Construct viable arguments and critique the reasoning of others.</li> <li>☐Model with mathematics.</li> <li>☑Use appropriate tools strategically.</li> <li>☐Attend to precision.</li> <li>☐Look for and make use of structure.</li> <li>☑Look for and express regularity in repeated reasoning.</li> </ul>	□ Number and Quantity □ Algebra □ Functions □ Modeling □ Geometry □ Statistics and Probability
Supporting Diverse Learners Students with IEPs receive the following accommodations: Preferential seating Extended time on tests/projects Students with LEPs receive the following accommodations: Modified tests  List Strutogica/Activities	
<u>List Strategies/Activities:</u> Notes	

Method(s) for Instruction	Use of Materials	Use of Technology
☐ Class/Group Discussion	☐ Teacher's Manual pg #	Cell Phone
Cooperative Learning	Student Text pg # 54-62	☐ PollEverywhere.com
⊠ Small Group	☐ Picture Books	CPS Clickers
☐ Guided Practice	☐ Handouts: HW #2	☐ Elmo Document Camera
□ Lecture or Direct Instruction	☐ Manipulative:	Software: AgileMind
Question/Answer	Related Equipment:	☐ Student Computers
Learning Stations	Adapted materials:	☐ Teacher Computer
☐ Teacher Modeling/Demo.		☐ Video Clips/DVD
☐ Journal writing		Website
Role Play		☐ Web 2.0 tool
☐ Hands-on		Other: Smartboard
☐ Inquiry Learning		
Game		
☐ Simulation/Role Playing		
☐ Independent Learning		
Other		

# Lesson Agenda

Warm up: How will you support students in accessing prior knowledge, personal, real world and/or cultural connections? The bellwork is written so that students do both review problems from previous topics and some problems from the current topic. This gives them a chance to strength their prior knowledge of past topics, and to help reinforce the new topic.

Time	Teacher Will Be:	Students Will Be:
5 minutes	Welcoming the class, giving any	Starting/attempting their bellwork.
Welcome/ Starting	necessary beginning announcements,	
Bellwork	and putting the students on task	
~ · ·	(bellwork).	
5 minutes	Mrs. Petrin and I will ask for	Select students will put up their work for a
Wrapping Up	volunteers to put up their work for a	specific Bellwork problem.
Bellwork	specific Bellwork problem.	
	After students have put up their work,	Students will correct their Bellwork if needed.
	Mrs. Petrin or I will lead the students in	Students will correct their Benwork it needed.
	a discussion about their peer's work,	
	and correct any mistakes or	
	miscalculations.	
10 minutes	Mrs. Petrin or I will ask for the students	Students will get out their homework and
HW	to put up their Bellwork and get out	begin checking their answers either from the
Check/Questions	their homework from the previous	projected answers on the smartboard, or from
	night. Then we will project/talk about	the answers we provide them.
	the answers and go over any problems	They will ask about any questions they need
	the students need (provided there is sufficient time).	answered.
20 minutes	Mrs. Petrin and I will ask the students	Opening their AgileMind textbook to page 54.
Lesson # 2	to put away their homework, get out	Opening their Agricivinia textbook to page 54.
Comparing Linear	their AgileMind textbook, and turn to	
and Exponential	page 54.	
Functions	Mrs. Petrin or I will then lead the	Students will take notes in their AgileMind
	students through the lesson using the	textbook and actively participate in the lesson.
	textbook and AgileMind software.	, , ,
10 minutes	We will wrap up the lesson in order to	After finishing the lesson the students have
Work/Study	give the students a chance to work/ask	work time to ask questions related to tonight's
Time/Exit Slip	questions about tonight's homework.	homework.

Transition to Wrap up/Closing: How will you engage students in self-assessment and/or reflection on key concepts?			
The students will complete a quick write where they will say one thing that went well/they liked/something new that they			
understand, and one thing they are still confused about/need help on.			
	•		
Daily Assessment       How do you know your students met your lesson objective(s)?	Formative:  Class discussion CPS clickers Email teacher Entrance/Exit slip Teacher Observe Thumbs up, neutral, or down Homework check Listened to conversations Math Journal	Summative:  Test Project Report Presentation Similar Exam Other	
	☐ Quiz ☐ Video quiz ☐ Voting ☐ Whiteboard Check ☐ Other		
Additional Teacher Preparation: Materials: HW #2			
Technology: Smartboard, AgileMind			
Copy:			
Locate:			
Daily Reflection			

Teacher: Rachel Wraley Lesson # in Unit: 2 Lesson Topic: Exponential Functions

# Lesson Objective and Assessment of Objective

**By the end of the lesson, students will be able to:** Write a function rule for an Exponential Function being conscious of growth or decay.

Content Objectives: Recognize exponential patterns using graphs and tables. Recognize the pattern in exponential growth and decay.

**Academic Language Objectives:** Important vocabulary for the lesson: Linear function, Exponential function, y-intercept, asymptote, constant, rate of change, common difference, and common multiplier

#### Why does this lesson matter?

Exponential functions are used in several professions/disciplines (mainly scientific) all over the world. It is important to be able to recognize exponential patterns and write exponential functions in order to be successful in those professions/disciplines.

# Assessment Statement: How will students show they have met the objective?

- Distinguish between situations that can be modeled with linear functions and with exponential functions. Understand that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. Compare linear functions and exponential functions that model real-world situations using tables, graphs, and equations. (AI.QE.1)
- Represent real-world and other mathematical problems that can be modeled with exponential functions using tables, graphs, and equations of the form  $y = ab^x$  (for integer values of x > 1, rational values of b > 0 and  $b \ne 1$ ); translate fluently among these representations and interpret the values of a and b. (AI.QE.2)

representations and interpret the values of a and b. (AI.QE      Graph exponential and quadratic equations in two variable  Type of Mathematical Knowledge Objective is seeking to measu  Declarative  Procedural  Conceptual  Standards for Mathematical Practices	es with and without technology. (A1.QE.3)
	Number and Quantity
Supporting Diverse Learners Students with IEPs receive the following accommodations:	<u>. I </u>
Preferential seating Extended time on tests/projects Students with LEPs receive the following accommodations: Modified tests	
List Strategies/Activities: Compare/Contrast Categories Notes	

Method(s) for Instruction	Use of Materials	Use of Technology
☐ Class/Group Discussion	Teacher's Manual pg #	Cell Phone
☐ Cooperative Learning	Student Text pg # 63-76	☐ PollEverywhere.com
	☐ Picture Books	☐ CPS Clickers
☐ Guided Practice	☐ Handouts: HW #3	☐ Elmo Document Camera
□ Lecture or Direct Instruction	☐ Manipulative:	
☐ Question/Answer	Related Equipment:	☐ Student Computers
☐ Learning Stations	Adapted materials:	☐ Teacher Computer
☐ Teacher Modeling/Demo.		☐ Video Clips/DVD
☐ Journal writing		☐ Website
☐ Role Play		☐ Web 2.0 tool
☐ Hands-on		Other: Smartboard
☐ Inquiry Learning		
Game		
☐ Simulation/Role Playing		
☐ Independent Learning		
Other		

# Lesson Agenda

<u>Warm up</u>: How will you support students in accessing prior knowledge, personal, real world and/or cultural connections? The bellwork is written so that students do both review problems from previous topics and some problems from the current topic. This gives them a chance to strength their prior knowledge of past topics, and to help reinforce the new topic.

Time	Teacher Will Be:	Students Will Be:
5 minutes Welcome/ Starting Bellwork	Welcoming the class, giving any necessary beginning announcements, and putting the students on task (bellwork).	Starting/attempting their bellwork.
5 minutes Wrapping Up Bellwork	Mrs. Petrin and I will ask for volunteers to put up their work for a specific Bellwork problem.	Select students will put up their work for a specific Bellwork problem.
	After students have put up their work, Mrs. Petrin or I will lead the students in a discussion about their peer's work, and correct any mistakes or miscalculations.	Students will correct their Bellwork if needed.
10 minutes HW Check/Questions	Mrs. Petrin or I will ask for the students to put up their Bellwork and get out their homework from the previous night. Then we will project/talk about the answers and go over any problems the students need (provided there is sufficient time).	Students will get out their homework and begin checking their answers either from the projected answers on the smartboard, or from the answers we provide them.  They will ask about any questions they need answered.
5 minutes Mathegories	After handing out an envelope to each group of students, we will be wandering around the classroom answering questions and/or checking work as we are asked.	Categorizing different functions, tables of values, graphs, and story problems as either linear or exponential.
15 minutes Lesson # 3 Exponential Growth and Decay	Mrs. Petrin and I will ask the students to put away their homework, get out their AgileMind textbook, and turn to page 63.  Mrs. Petrin or I will then lead the students through the lesson using the textbook and AgileMind software.	Opening their AgileMind textbook to page 63.  Students will take notes in their AgileMind textbook and actively participate in the lesson.

	*** ***	<del> </del>	1 . 2 . 21 . 1	
10 minutes	We will wrap up the lesson in order to		After finishing the lesson the students have	
Work/Study	give the students a chance to work/ask		work time to ask questions related to tonight's	
Time/Exit Slip	questions abou	ut tonight's homework.	homework	
Transition to Wrap up/Closing: How will you engage students in self-assessment and/or reflection on key concepts?				
Daily Assessment How do yo	ou know your	Formative:		Summative:
students met your lesson objec	ctive(s)?			☐ Test
		CPS clickers		Project
<ul><li></li></ul>		☐ Email teacher ☐ Entrance/Exit slip		☐ Report ☐ Presentation
application		☐ Entrance/Exit snp ☐ Teacher Observe		Final Exam
analysis		Thumbs up, neutral, or down		Other
synthesis				
evaluation		Listened to conversations		
		☐ Math Journal☐ Quiz		
		☐ Video quiz		
		Voting		
		☐ Whiteboard Check		
		Other		L
Additional Teacher Promaterials: HW #3	<u>eparation:</u>			
Technology: Smartboard	l, AgileMind			
Copy:				
Locate:				
Daily Reflection				<del></del>
Dany Kenecuon				

Teacher: Rachel Wraley Lesson # in Unit: 3 Lesson Topic: Exponential Functions

# **Lesson Objective and Assessment of Objective**

**By the end of the lesson, students will be able to:** Write a function rule for an Exponential Function. Model situations by writing an Exponential Function, create a table of values, and graph the function.

**Content Objectives:** Recognize Exponential patterns using graphs and tables. Recognize the pattern in Exponential growth and decay. Modeling with Exponential Functions.

**Academic Language Objectives:** Important vocabulary for the lesson: Linear function, Exponential function, y-intercept, asymptote, constant, rate of change, common difference, and common multiplier

### Why does this lesson matter?

Exponential functions are used in several professions/disciplines (mainly scientific) all over the world. It is important to be able to recognize exponential patterns and write exponential functions in order to be successful in those professions/disciplines.

### Assessment Statement: How will students show they have met the objective?

- Distinguish between situations that can be modeled with linear functions and with exponential functions. Understand that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. Compare linear functions and exponential functions that model real-world situations using tables, graphs, and equations. (AI.QE.1)
- Represent real-world and other mathematical problems that can be modeled with exponential functions using tables, graphs, and equations of the form  $y = ab^x$  (for integer values of x > 1, rational values of b > 0 and  $b \ne 1$ ); translate fluently among these representations and interpret the values of a and b. (AI.QE.2)
- Graph exponential and quadratic equations in two variables with and without technology. (A1.QE.3)

Type of Mathematical Knowledge Objective is seeking to measu  ☐ Declarative ☐ Procedural	<u>re</u>
Standards for Mathematical Practices   Make sense of problems and persevere in solving them.  Reason abstractly and quantitatively.  Construct viable arguments and critique the reasoning of others.  Model with mathematics.  Use appropriate tools strategically.  Attend to precision.  Look for and make use of structure.  Look for and express regularity in repeated reasoning.	Mathematic Conceptual Categories  Number and Quantity Algebra Functions Modeling Geometry Statistics and Probability
Supporting Diverse Learners Students with IEPs receive the following accommodations: Preferential seating Extended time on tests/projects Students with LEPs receive the following accommodations: Modified tests	
List Strategies/Activities: Notes	

Method(s) for Instruction	Use of Materials	Use of Technology
☐ Class/Group Discussion	☐ Teacher's Manual pg #	Cell Phone
Cooperative Learning	Student Text pg # 77-80	☐ PollEverywhere.com
Small Group	☐ Picture Books	CPS Clickers
☐ Guided Practice	☐ Handouts: HW #4	☐ Elmo Document Camera
□ Lecture or Direct Instruction	☐ Manipulative:	Software: AgileMind
Question/Answer	Related Equipment:	☐ Student Computers
☐ Learning Stations	Adapted materials:	☐ Teacher Computer
☐ Teacher Modeling/Demo.	_	☐ Video Clips/DVD
☐ Journal writing		Website
☐ Role Play		☐ Web 2.0 tool
☐ Hands-on		Other: Smartboard
☐ Inquiry Learning		
Game		
☐ Simulation/Role Playing		
☐ Independent Learning		
Other		

# **Lesson Agenda**

<u>Warm up</u>: How will you support students in accessing prior knowledge, personal, real world and/or cultural connections? The bellwork is written so that students do both review problems from previous topics and some problems from the current topic. This gives them a chance to strength their prior knowledge of past topics, and to help reinforce the new topic.

Time	Teacher Will Be:	Students Will Be:
5 minutes Welcome/ Starting Bellwork	Welcoming the class, giving any necessary beginning announcements, and putting the students on task (bellwork).	Starting/attempting their bellwork.
5 minutes Wrapping Up Bellwork	Mrs. Petrin and I will ask for volunteers to put up their work for a specific Bellwork problem.	Select students will put up their work for a specific Bellwork problem.
	After students have put up their work, Mrs. Petrin or I will lead the students in a discussion about their peer's work, and correct any mistakes or miscalculations.	Students will correct their Bellwork if needed.
10 minutes HW Check/Questions	Mrs. Petrin or I will ask for the students to put up their Bellwork and get out their homework from the previous night. Then we will project/talk about the answers and go over any problems the students need (provided there is sufficient time).	Students will get out their homework and begin checking their answers either from the projected answers on the smartboard, or from the answers we provide them.  They will ask about any questions they need answered.
20 minutes Lesson # 4 Modeling Exponential Growth	Mrs. Petrin and I will ask the students to put away their homework, get out their AgileMind textbook, and turn to page 77.  Mrs. Petrin or I will then lead the students through the lesson using the textbook and AgileMind software.	Opening their AgileMind textbook to page 77.  Students will take notes in their AgileMind textbook and actively participate in the lesson.
10 minutes Work/Study Time/Exit Slip	We will wrap up the lesson in order to give the students a chance to work/ask questions about tonight's homework.	After finishing the lesson the students have work time to ask questions related to tonight's homework.

Transition to Wrap up/Closing: How will you engage students in self-assessment and/or reflection on key concepts?		
Transition to wrap up/Closing. How will you engage students in sen-assessment and/or reflection on key concepts:		
Daily Assessment How do you know your	Formative:	Summative:
students met your lesson objective(s)?	☐ Class discussion	Test
	CPS clickers	Project
knowledge	Email teacher	Report
comprehension	Entrance/Exit slip	Presentation
application	Teacher Observe	Final Exam
analysis	Thumbs up, neutral, or down	Other
synthesis	Homework check	
evaluation	Listened to conversations  Math Journal	
	☐ Video quiz	
	Voting	
	Whiteboard Check	
	Other	
Additional Teacher Preparation:		
Materials: HW #4		
Materials. HW #4		
Technology: Smartboard, AgileMind		
Copy:		
Copy.		
Locate:		
Daily Reflection		

Teacher: Rachel Wraley Lesson # in Unit: 4 Lesson Topic: Exponential Functions

# **Lesson Objective and Assessment of Objective**

By the end of the lesson, students will be able to: Model situations by writing an Exponential Function, create a table of values, and graph the function.

**Content Objectives:** Recognize Exponential patterns using graphs and tables. Recognize the pattern in Exponential growth and decay. Modeling with Exponential Functions.

**Academic Language Objectives:** Important vocabulary for the lesson: Linear function, Exponential function, y-intercept, constant, rate of change, increasing, decreasing, growth, decay, common difference, and common multiplier

### Why does this lesson matter?

Exponential functions are used in several professions/disciplines (mainly scientific) all over the world. It is important to be able to recognize exponential patterns and write exponential functions in order to be successful in those professions/disciplines.

### Assessment Statement: How will students show they have met the objective?

- AI.QE.1: Distinguish between situations that can be modeled with linear functions and with exponential functions. Understand that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. Compare linear functions and exponential functions that model real-world situations using tables, graphs, and equations.
- AI.QE.2: Represent real-world and other mathematical problems that can be modeled with exponential functions using tables, graphs, and equations of the form  $y = ab^x$  (for integer values of x > 1, rational values of b > 0 and  $b \ne 1$ ); translate fluently among these representations and interpret the values of a and b.
- A1.QE.3: Graph exponential and quadratic equations in two variables with and without technology.

Type of Mathematical Knowledge Objective is seeking to measur  ☐ Declarative ☐ Procedural ☐ Conceptual	<u>e</u>
Standards for Mathematical Practices	Mathematic Conceptual Categories
	□ Number and Quantity □ Algebra □ Functions □ Modeling □ Geometry □ Statistics and Probability
Supporting Diverse Learners Students with IEPs receive the following accommodations: Preferential seating Extended time on tests/projects Students with LEPs receive the following accommodations: Modified tests	
List Strategies/Activities: Jigsaw	

Method(s) for Instruction  ☐ Class/Group Discussion ☐ Cooperative Learning ☐ Small Group ☐ Guided Practice ☐ Lecture or Direct Instruction ☐ Question/Answer ☐ Learning Stations ☐ Teacher Modeling/Demo. ☐ Journal writing ☐ Role Play	on	Use of Materials  ☐ Teacher's Manual pg # ☐ Student Text pg # ☐ Picture Books ☑ Handouts: HW #5, Modeling I Growth Packet, Exponential Func Test ☐ Manipulative: ☐ Related Equipment: ☐ Adapted materials:		Use of Technology  Cell Phone PollEverywhere.com CPS Clickers Elmo Document Camera Software: AgileMind Student Computers Teacher Computer Video Clips/DVD Website Web 2.0 tool
Hands-on Inquiry Learning Game Simulation/Role Playing Independent Learning Other				Other: Smartboard
Lesson Agenda Warm up: How will you	u support student	ts in accessing prior knowledge	e, personal, re	al world and/or cultural connections?
T:	T1 137:11	D	C414 V	Will D.
Time	Teacher Will		Students V	
5 minutes HW #4 Questions	We will project/talk about the answers from last night's homework and go over any problems the students need (provided there is sufficient time).		Students will get out their homework and begin checking their answers either from the projected answers on the smartboard, or from the answers we provide them.  They will ask about any questions they need answered.	
5 minutes Modeling Exponential Functions Directions	I will have them put everything except their Modeling Exponential Growth Packet away. I will then give the directions for the packet and assign each group a problem from the packet		They will put away their things, listen to directions, and ask any clarifying questions they have.	
10 minutes Modeling with Exponential Functions with their group	to complete.  During the activity Mrs. Petrin and I will be roaming around the classroom providing any necessary academic/language support.  Towards the end we will give each student one of five difference fake currency.		Modeling the specific situation that goes with their problem by creating a table of values, a function rule, graph the function, and then come up with a conclusion/solution to the accompanying questions.	
15 minutes "Presentations" of Modeled Exponential Functions	Roaming around the room providing support when necessary.		The students move to new groups based on the currency they received from Mrs. Petrin or me.  After students re-group they share the solution to their problem with their new group members.	
10 minutes Final problem	I will lead the students through solving the final problem.		Working through the final problem.	
Transition to Wrap u	p/Closing: Ho	w will you engage students in s	self-assessmen	t and/or reflection on key concepts?
<u>Daily Assessment</u> How do you students met your lesson object		Formative:  ⊠ Class discussion  □ CPS clickers		Summative:  Test Project

knowledge	☐ Email teacher	Report	
□ comprehension	Entrance/Exit slip	☐ Presentation	
□ application	☐ Teacher Observe	☐ Final Exam	
□ analysis	☐ Thumbs up, neutral, or down	☐ Other	
synthesis			
evaluation	☐ Listened to conversations		
	☐ Math Journal		
	☐ Quiz		
	☐ Video quiz		
	☐ Voting		
	☐ Whiteboard Check		
	Other		
Additional Teacher Preparation:			
Materials: HW #5, Modeling Exponentia	al Growth Packet.		
Exponential Function Practice Test			
Exponential I unction I factice Test			
Technology: Smartboard, AgileMind			
Copy:			
Copy.			
Locate:			
	·		
Daily Reflection			

Teacher: Rachel Wraley Lesson # in Unit: 5 Lesson Topic: Exponential Functions

### **Lesson Objective and Assessment of Objective**

**By the end of the lesson, students will be able to:** Write a function rule for an Exponential Function. Model situations by writing an Exponential Function, create a table of values, and graph the function.

**Content Objectives:** Recognize Exponential patterns using graphs and tables. Recognize the pattern in Exponential growth and decay. Modeling with Exponential Functions.

**Academic Language Objectives:** Important vocabulary for the lesson: Linear function, Exponential function, y-intercept, asymptote, constant, rate of change, common difference, and common multiplier

### Why does this lesson matter?

Exponential functions are used in several professions/disciplines (mainly scientific) all over the world. It is important to be able to recognize exponential patterns and write exponential functions in order to be successful in those professions/disciplines.

### Assessment Statement: How will students show they have met the objective?

- Distinguish between situations that can be modeled with linear functions and with exponential functions. Understand that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. Compare linear functions and exponential functions that model real-world situations using tables, graphs, and equations. (AI.QE.1)
- Represent real-world and other mathematical problems that can be modeled with exponential functions using tables, graphs, and equations of the form  $y = ab^x$  (for integer values of x > 1, rational values of b > 0 and  $b \ne 1$ ); translate fluently among these representations and interpret the values of a and b. (AI.QE.2)
- Graph exponential and quadratic equations in two variables with and without technology. (A1.QE.3)

Type of Mathematical Knowledge Objective is seeking to measu  ☐ Declarative ☐ Procedural ☐ Conceptual	<u>re</u>
Standards for Mathematical Practices	Mathematic Conceptual Categories
Make sense of problems and persevere in solving them.  Reason abstractly and quantitatively.  Construct viable arguments and critique the reasoning of others.  Model with mathematics.  Use appropriate tools strategically.  Attend to precision.  Look for and make use of structure.  Look for and express regularity in repeated reasoning.	Number and Quantity  Algebra  Functions  Modeling  Geometry  Statistics and Probability
Supporting Diverse Learners Students with IEPs receive the following accommodations:	
Preferential seating	
Extended time on tests/projects	
Students with LEPs receive the following accommodations:	
Modified tests	
List Strategies/Activities:	

Method(s) for Instruction  ☐ Class/Group Discussion ☐ Cooperative Learning ☐ Small Group ☐ Guided Practice ☐ Lecture or Direct Instruction ☐ Question/Answer ☐ Learning Stations ☐ Teacher Modeling/Demo. ☐ Journal writing ☐ Role Play ☐ Hands-on ☐ Inquiry Learning ☐ Game ☐ Simulation/Role Playing ☐ Independent Learning ☐ Other  Lesson Agenda		Use of Materials  Teacher's Manual pg # Student Text pg # Picture Books Handouts: Exponential I Test Manipulative: Related Equipment: Adapted materials:	Functions Practice		Use of Technology  Cell Phone PollEverywhere.com CPS Clickers Elmo Document Camera Software: AgileMind Student Computers Teacher Computer Video Clips/DVD Website Web 2.0 tool Other: Smartboard	
	ort student	s in accessing prior know	vledge, personal	, rea	al world and/or cultural connections?	
Time	Teache	r Will Be:		Stu	idents Will Be:	
5 minutes	Keeping	g the students on track	(doing	Co	mpleting their bellwork quiz.	
Welcome/Bellwork Quiz	their be	llwork quiz).				
10 minutes	Mrs. Pe	trin or I will ask for th	ne students	Stu	idents will get out their homework	
HW #5 Check/Questions	to get o	ut their homework fro	m the	and begin checking their answers		
	previou	s night. Then we will j	project/talk	eitl	her from the projected answers on	
	about th	e answers and go over	r any	the	smartboard, or from the answers	
		ns the students need (p	provided		we provide them.	
	there is	sufficient time).		They will ask about any questions		
					y need answered.	
25 minutes		trin and I will facilitat		Participating in the test review.		
Test Review	session for the Exponentials Functions Test.		Functions			
10 minutes	We will wrap up the lesson in order to		order to	After finishing the lesson the students		
Work/Study Time		students a chance to		have work time to ask questions		
Work Study Time	_			related to tonight's homework.		
questions about tonight's homework		ile work.	related to tonight 5 homework.			
			ts in self-assessn	nent	and/or reflection on key concepts?	
<u>Daily Assessment</u> How do you know y students met your lesson objective(s)?	vour	Formative:  ⊠ Class discussion			Summative:	
		CPS clickers			Project	
knowledge		Email teacher			Report	
□ comprehension     □ application		<ul><li>☑ Entrance/Exit slip</li><li>☑ Teacher Observe</li></ul>			Presentation Final Exam	
analysis		Thumbs up, neutral, or d	down		Other	
synthesis		Homework check				
evaluation		Listened to conversation  Math Journal	18			
		Quiz				
		☐ Video quiz				
		<ul><li>☐ Voting</li><li>☐ Whiteboard Check</li></ul>				
		Other		_		
Additional Teacher Preparati						
Materials: Exponential Function	n Practice	e Test				
Technology: Smartboard, Agile	Mind					

Copy:	
Locate:	
Daily Reflection	