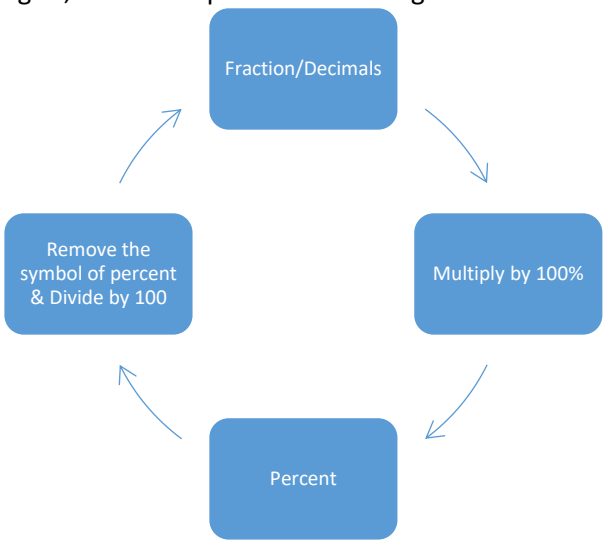
Khaitan Public School,Sahibabad

Class: VII	**Subject: Mathematics**	**Day:1**	**Time duration:40 min**
Name of the lesson/ unit	Comparing Quantities		
Topic/lesson	Percentage		
Learning Objective	To be able to compare two quantities using percentage.		
Expected learning outcomes:	Student will be able to • Recall and Define percentage • Convert Fraction into percentage &Vice versa. • Convert Decimal into Percentage & Vice versa. • Estimate the part of anarea relatedwith the percentage. • Compute percentage for given fraction, decimal and whole number and vice versa.		
Common misconception (if any):	• Instead of multiplying they divide by 100 while converting into percentage. • Instead of dividing they multiply by 100 while converting into fractions and decimal. • Not understanding that percents are a number out of one hundred; percents refer to hundredths • Thinking percents cannot be greater than 100		
Prerequisite knowledge:	Multiplying & dividing fractions,decimals		
Assessment of qualifying knowledge:	Oral questioning		
Transaction methodology			
Starter/ warm up(Verbal): 2 Min	If Anita has scored 300 out of 400 and Radha has got 280 out of 350. Anita and Radha are into argument that who has scored better. How will they decide? Situation given on Pg 157		
Questioning & discussion(Verbal) :10 Min (VIDEO &Directive Teaching Question)	Teacher will show the flipped Video and then she will ask few questions to introduce the concept of the Percentage. 1.What is the meaning of percentage ? 2.What if the denominator is not 100 ?(Pg 158) 3. a. 35% +_____ % = 100%		

Peer discussion-10 Mins **Collaborative work :5 Min** **<u>Independent work followed by the board work-5Min</u>** **Note book work**	b. 64% +20%+ ____ % = 1000% c. 45 % = 100 % - _____% d. 70% = _____% - 30% 4. If 65% of students in a class have abicycle , what per cent of the students do not have bicycles ? 5. We have a basket full of apples , oranges and mangoes . If 50% are apples, 30% are oranges , then what per cent are mangoes ?  *Collaborative work-Students will discuss book questions with their peers and comprehend them.* Teacher will collect responses and discuss the above questions on the board. <u>Students will do Questions independently .</u> Teacher will discuss the solution on the board by calling individually students on the board.
Closure/ Plenary(Peer discussion)*Collaborative work(Book)*-: (3 Min)	*Collaborative work-Students will discuss Q.1 of Try These of Pg No. 158 and solve with their peer in the book.*
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII Filpped video

Khaitan Public School,Sahibabad

Class: VII	Subject: Mathematics	Day:2	Time duration:40 min
Name of the lesson/ unit	Comparing Quantities		
Topic/lesson	Percentage		
Learning Objective	To be able to compare two quantities using percentage.		
Expected learning outcomes:	Student will be able to • Recall and Define percentage • Convert Fraction into percentage &Vice versa. • Convert Decimal into Percentage & Vice versa. • Estimate the part of anarea relatedwith the percentage. • Compute percentage for given fraction, decimal and whole number and vice versa.		
Common misconception (if any):	• Not realizing that one whole equals 100% • Not knowing which operation to use when working with percents • Having difficulty identifying the "whole" that the percent refers to. • Not recognizing the "whole" the percent refers to, and that a second percent change refers to a different "whole" than the firstInstead of multiplying they divide by 100 while converting into percentage.		
Prerequisite knowledge:	Multiplying & dividing fractions,decimals		
Assessment of qualifying knowledge:	Oral questioning		
Transaction methodology			
Starter/ warm up Independent work (Notebook work): 2 Min	Student will do Try These of Pg No. 161 In notebook and teacher will ask from the students.		
Questioning & discussion(Verbal) :10 Min	Teacher will collect response from the starter and will ask following questions : 1.5% of the income is saved by Ravi . 2. Rekha gets 10% on every book sold by her . What can you infer from each of these statements ? Teacher will introduce the concept of		

Peer discussion-10 Mins **Questioning & discussion(Verbal) :5 Min** **<u>Independent work followed by the board work-5 Min</u>** **Note book work**	x% of y = z Where x is percentage of part , y is whole part & z is part of whole. Then she will explain 5% mean 5 parts out of 100 . It means Ravi is saving Rs 5 out of every Rs 100 that he earns and explain in the class . *Collaborative work-Students will discuss book questions with their peers and comprehend them.* Teacher will collect responses and discuss the above questions on the board. <u>Students will do *book questions* independently .</u> Teacher will discuss the solution on the board by calling individually students on the board.
Closure/ Plenary(Peer discussion)*Collaborative work(Book)*-: **(3 Min)**	*Collaborative work-Students will discuss Q.1 of Try These of Pg No. 158 and solve with their peer in the book.*
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII Filpped video

Khaitan Public School,Sahibabad

Class: VII	**Subject: Mathematics**	**Day:3**	**Time duration:40 min**
Name of the lesson/ unit	Comparing Quantities		
Topic/lesson	Ratios to Percent & Increase or Decrease as Percent		
Learning Objective	To be able to compare two quantities using percentage.		
Expected learning outcomes:	Student will be able to • Convert ratio into percent • Find the increase or decrease as Percent • Compute profit %,loss % & increase/decrease percent		
Common misconception (if any):	• Not converting into the fraction • Not placing values at correct place • Thinking an increase of n% followed by a decrease of n% restores the amount to its original value. • Finding the increase or decrease instead of the final amount		
Prerequisite knowledge:	Multiplying & dividing fractions,decimals		
Assessment of qualifying knowledge:	Oral questioning		
Transaction methodology			
Starter/ warm up(Verbal): 3 Min	Teacher will draw 10 shapes on the board and shade 3 out of them. Q.- What is the fraction for shaded portion? Q.- What is the fraction for unshaded portion? Q.- What is the ratio of shaded shapes to unshaded shapes?(On board)		
Questioning & discussion(Verbal) :7Min **Peer discussion-10 Mins**	Teacher will explain in the class that how to change ratio to percent To convert a ratio to percent , Convert the ratio to fraction and then convert the fraction to percentage . Percentage increase or decrease = Change in Value / Original Value *100% Eg. Increase in population and petrol rates etc... *Collaborative work-Students will discuss book questions with their peers and*		

Questioning & discussion(Verbal) :5 Min **<u>Independent work followed by the board work-10 Min</u>** **Note book work**	*comprehend them.* Teacher will collect responses and discuss the above questions on the board. <u>Students will do *book questions* independently .</u> Teacher will discuss the solution on the board by calling individually students on the board.
Closure/ Plenary(Peer discussion)*Collaborative work(Book)*-: **(5 Min)**	*Collaborative work-Students will discuss Q.1 of Try These of Pg No. 158 and solve with their peer in the book.*
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII Filpped video

Khaitan Public School,Sahibabad

Class: VII	Subject: Mathematics	Day:4	Time duration:40 min
Name of the lesson/ unit	Comparing Quantities		
Topic/lesson	Profit & loss ; Profit & loss percent		
Learning Objective	To be able to compare two quantities using percentage.		
Expected learning outcomes:	Student will be able to • Recall the terms C.P, S.P ,Profit & Loss • Find the profit , loss , C.P &S.P • Find the profit and loss percent. • Find missing value as given other values. • Compute profit %,loss % & increase/decrease percent		
Common misconception (if any):	• Placing the incorrect value • Using incorrect formulae • Calculation error		
Prerequisite knowledge:	Multiplying & dividing fractions,decimals		
Assessment of qualifying knowledge:	Oral questioning		
Transaction methodology			
Starter/ warm up(Verbal): 5 Min	ROLE PLAY-Teacher will ask students to discuss what they know about profit and loss concept for 1 minute.Teacher will now collect students response and will gather key words on board.Teacher will now ask two volunteers to perform an act/role play explaining the application of above concept. Teacher will ask the following question to recall the concept of Profit and loss. 1. A toy bought for Rs 72 is sold at Rs 80. 2. A t-shirt bought for Rs 120 is sold at Rs 100. 3. A cycle bought for Rs 800 is sold at Rs 940. Find the profit or loss.		
Questioning & discussion(Verbal) :5 Min	Teacher will collect response from the starter and introduce the profit or loss percent. The price at which any item bought is called cost price and The price at which any item sold is called selling price. If C.P> S.P ; Loss		

Peer discussion-10 Mins **Questioning & discussion(Verbal) :5 Min** **<u>Independent work followed by the board work-10 Min</u>** **Note book work**	If C.P< S.P ; Profit Profit/loss % = (profit/loss)/C.P *100 *Collaborative work-Students will discuss book questions with their peers and comprehend them.* Teacher will collect responses and discuss the above questions on the board. <u>Students will do .*book questions* independently .</u> Teacher will discuss the solution on the board by calling individually students on the board.
Closure/ Plenary(Peer discussion)*Collaborative work*-: (5 Min)	*Collaborative work-Draw a content map of the chapter/concept learnt .*
Home Learning	From book Assignment will be given
Resources	NCERT Book of Mathematics for Class VII Filpped video