Topic: Types of Errors What am I learning today?				
Main Ideas/ Questions Warm-Up	Notes What margin of error is associated with a sample size of 3200? In a sample 3200 HS Seniors, 2080 people responded with "yes" to "Are you ready to graduate?". Write a confidence statement explaining the results of the survey.			
Sample Design	Probability Sample – A sample chosen by chance			
	Sampling Frame – A list of from which we can draw our sample			
Sampling Errors	Sampling Errors — Errors that are caused by the act of taking a sample. They cause the sample statistic to be different from the population parameter 1) Random Sampling Error — This error is caused by in selecting a random sample. This type of error is included in the margin of error in the confidence statement			
	Undercoverage – Occurs when some groups in the population are when choosing a sample			
Examples	What kind of error? a) Dr. Giles asked Freshmen and Juniors their opinions on the Cafeteria food.			
	b) 300 male students at Wheeler were asked their heights and a confidence statement was written about all teenage boys and their heights.			

<u>Topic:</u> Types of Errors <u>Date</u> :			<u>Date</u> :	
Main Ideas/	<u>Notes</u>			
Questions Non-Sampling Error	Non-Sar	mpling Errors – Errors relat	ed to the act of taking a sample.	
	They can be present even in the population parameter			
	1) <u>Proce</u>	<u>essing Error</u> – Mistakes in mechan	ical tasks such as doing arithmetic	
	or en	tering responses into a computer		
	2) <u>Resp</u>	onse Error – When someone gives	s an response	
	(lying	, forgetting, or just guessing at an a	answer)	
	3) Non-response – Failure to obtain data from an individual selected for a			
	sample. Most nonresponse errors happen because some individuals can't			
	be co	ntacted or they refuse to cooperate		
	4) Ques	tion-Wording Bias – Sampling bia	as where the of a	
		ion causes favoring for a certain ou		
Examples	 What kir	nd of error?		
Lamples	a) The subject lies about past drug use.			
		abject hes about past aray aser		
	h) Johnn	v walked around Wheeler High Scho	ool and surveyed students asking	
	b) Johnny walked around Wheeler High School and surveyed students asking, "How dumb is it to eat vegetables?"			
	11000	dumb is it to cut vegetables.		
	c) Data is	s collected by surveying people as t	hey walk into the mall. Several	
	participants refuse to participate.			
	Partici	partition to participate.		
	a) A typij	ng error is made in recording the da	ata	
	a) A typii	ing cirol is made in recording the de	aca.	
Non-Biased Sa	mplina		Non-Sampling Errors	
- SRS - Systematic		Sampling Errors	- Processing Error	
		- Random	- Response Error	
- Stratified		Sampling Error	Nonresponse ErrorQuestion-Wording Bias	
Choose		- Undercoverage	Question Wording Blas	
individuals from a				
sampling frame			Analyze your data	
Biased Samp	ling	Survey the		
- Convenier		individuals in your		
Convenier		sample		

Gathering Data Through Surveys Flowchart

- Voluntary