

# OVERVIEW

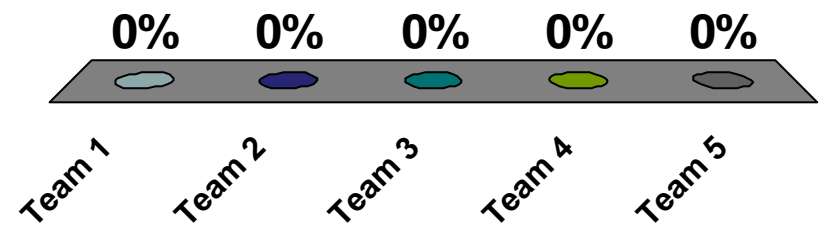
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- DNA structure/DNA as genetic material (review)
- DNA replication
- Transcription
- Translation
- Mutation

# Please select a Team.

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1. Team 1
2. Team 2
3. Team 3
4. Team 4
5. Team 5



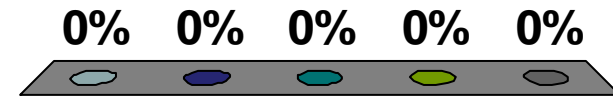
# Basic chemistry:

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- 100

# The genetic material of all cellular organisms.

1. What is RNA?
- 😊 2. What is DNA?
3. What is Protein?
4. What is Carbohydrate?
5. What is Lipid?



What is RNA?  
 What is DNA?  
 What is Protein?  
 What is Carbohydrate?  
 What is Lipid?

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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121	122	123	124	125	126														

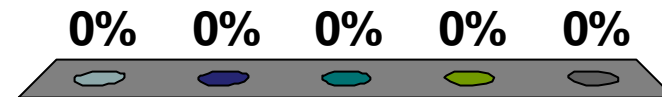
# Basic Chemistry:

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- 200

# The building blocks of DNA.

1. Amino acids
2. Monosaccharides
- 😊 3. Nucleic acids
4. Fatty acids
5. glycerol



Amino acids  
Monosaccharides  
Nucleic acids  
Fatty acids  
glycerol

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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# Basic chemistry:

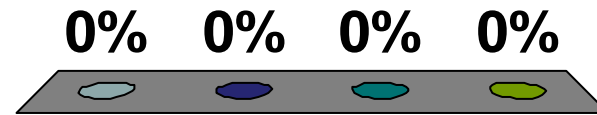
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- 300

# The part of a DNA molecule that forms covalent bonds between nucleotides.



1. What are the sugar and phosphate
2. What are the nitrogenous bases
3. What are Carboxylic acid and Amino groups
4. What are the hydroxyl and Carboxylic acid



What are the sugar a...  
 What are the Nitroge...  
 What are Carboxylic ...  
 What are the hydrox...

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126														



# Team Scores

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488.89 Team 5

477.78 Team 4

456.25 Team 2

410 Team 1

335.71 Team 3

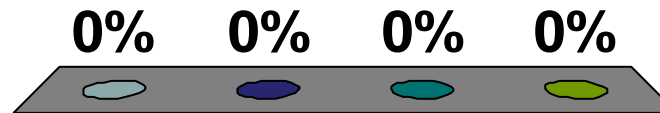
# Base pairing:

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- 100

# Nitrogenous bases in DNA.

1. What are AGUC?
- 😊 2. What are AGTC?
3. What are ABCD?
4. What are GCBD?



What are AGUC?  
 What are AGTC?  
 What are ABCD?  
 What are GCBD?

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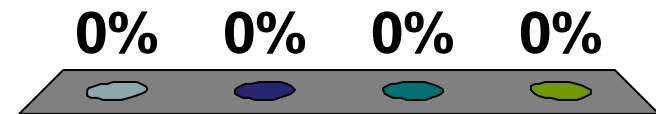
# Base pairing:

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- 200

In a DNA helix adenine pairs with \_\_\_\_\_, and guanine pairs with \_\_\_\_\_.

1. cytosine...uracil
2. cytosine....thymine
3. guanine.....adenine
- 😊4. thymine.....cytosine



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# Base Pairing:

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- 300

If one strand of a DNA double helix has the sequence **GTCCAT**, what is the sequence of the other strand?

1. TGAACG
- 😊 2. CAGGTA
3. CAGGUA
4. ACTTGC

								0%	0%	0%	0%								
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# Team Scores

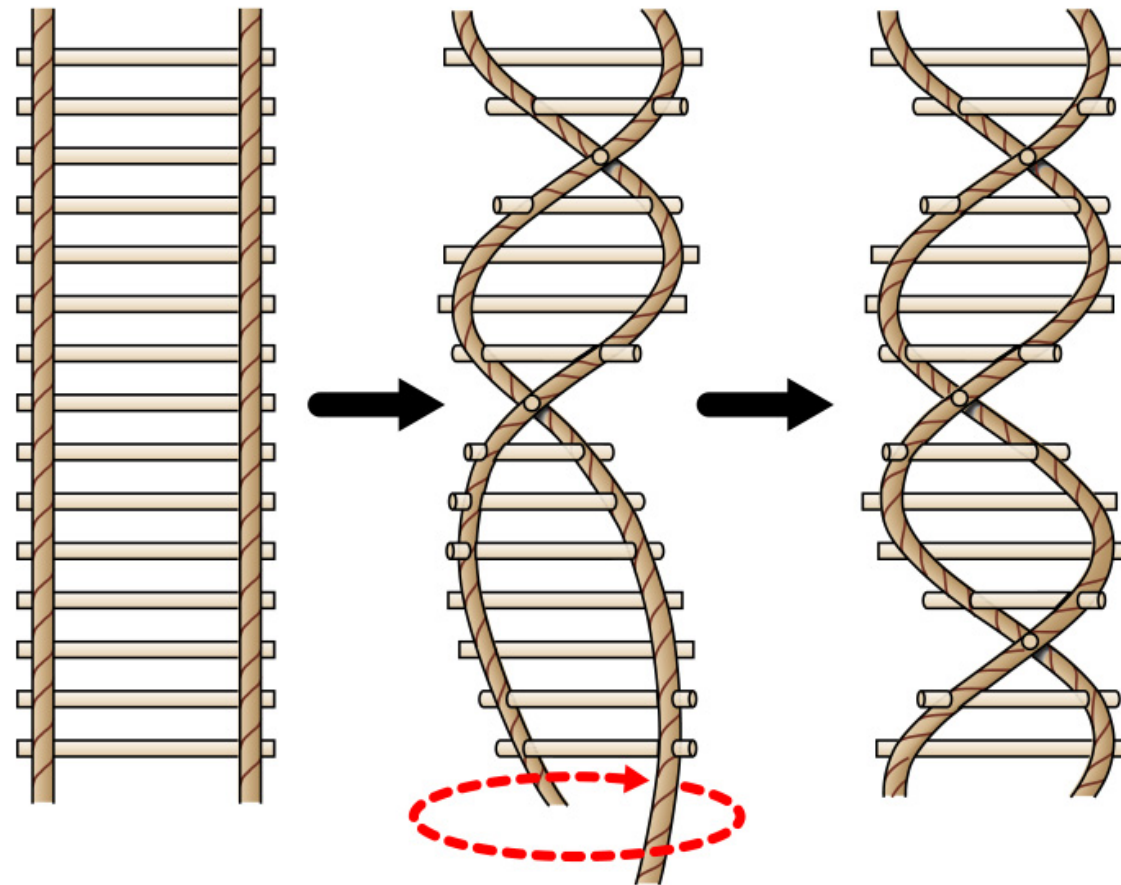
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1088.89	Team 5
1000	Team 2
1000	Team 4
935.71	Team 3
780	Team 1



# Final JeopardY!!

- The model of DNA is like a rope ladder twisted into a spiral

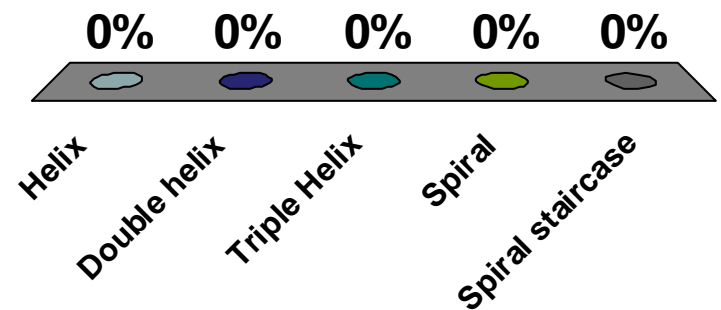


**Twist**

Figure 10.4

# Final Jeopardy: We call the structure of DNA shown in the last slide a \_\_\_\_\_.

1. Helix
- 😊 2. Double helix
3. Triple Helix
4. Spiral
5. Spiral staircase



# Team Scores

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3000	Team 2
2950	Team 5
2683.33	Team 3
2500	Team 4
1800	Team 1