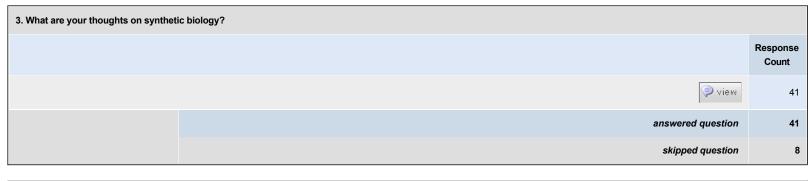
## Ethical, Economical, Environmental, Legal and Social issues of Synthetic Biology (for High Schools)

1. I consent		
	Response Percent	Response Count
I Consent	100.0%	49
ar	wered question	49
	kipped question	0

2. Have you ever heard of synthetic biology?					
		Response Percent	Response Count		
Yes		39.6%	19		
No		62.5%	30		
		Comment	0		
		answered question	48		
		skipped question	1		



4. What are your thoughts on the examples given on page 4?	
	Response Count
	39
answered question	39
skipped question	10

5. Do you think continuing this research is worth while?						
		Response Percent	Response Count			
Yes		82.1%	32			
No		2.6%	1			
Don't Know		5.1%	2			
Comment		10.3%	4			
	answere	d question	39			
	skippe	ed question	10			

		Response Count
	view	39
	answered question	39
	skipped question	10
7. What potential products do you en	vision coming from synthetic biology?	
		Response

7. What potential products do you envision coming from synthetic biology?	
	Response Count
	38
answered question	38
skipped question	11

8. Another example of synthetic biology would be designing a biosensor that detects arsenic levels in water and emits a pH signal in response. The device could be used to test whether drinking water is safe and meets the guidelines set out by the World Health Organization. However, the complexity of living systems and their interactions with nature mean that no synthetically produced biosensor will always perform as expected. Rate your level of concern on the following issues related to the biosensors. (1 least concerned to 10 most concerned)

	1	2	3	4	5	6	7	8	9	10	Response Count
Biosensors disrupting species native to the area	0.0% (0)	0.0% (0)	0.0% (0)	5.3% (2)	13.2% (5)	10.5% (4)	23.7% (9)	21.1% (8)	7.9% (3)	18.4% (7)	38
Biosensors negatively impacting humans	0.0% (0)	5.3% (2)	10.5% (4)	2.6% (1)	5.3% (2)	2.6% (1)	7.9% (3)	23.7% (9)	15.8% (6)	26.3% (10)	38
Biosensors that successfully colonize an area but evolve beyond our control	2.6% (1)	7.9% (3)	2.6% (1)	7.9% (3)	2.6% (1)	7.9% (3)	10.5% (4)	15.8% (6)	13.2% (5)	28.9% (11)	38
Biosensors that disrupt the local environment eg water, vegetation	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	5.3% (2)	7.9% (3)	21.1% (8)	26.3% (10)	15.8% (6)	23.7% (9)	38
Comment							t view	3			
answered question								d question	38		
skipped question								d question	11		

9. Do you think synthetic biology shou	uld be regulated?			
			Response Percent	Response Count
Yes			86.8%	33
No			10.5%	4
Don't Know			2.6%	1
		Commer	nt  view	20
		answere	ed question	38
		skippe	ed question	11

10. If yes then who should regulate it?		
	Response Percent	Response Count

Provincial/state government		28.9%	11
Federal government		50.0%	19
International organization		60.5%	23
Civilian organization		10.5%	4
Military		2.6%	1
Other		21.1%	8
	Commen	t 👂 view	10
	answere	d question	38
	skippe	ed question	11

11. Should humans be allowed to combine the genes of different species to make a genome?					
			Response Percent	Response Count	
Yes			57.9%	22	
No			15.8%	6	
Don't Know			26.3%	10	
		Comment	view	27	
		answered	d question	38	
		skippe	d question	11	

12. Do you think that advancements in	n synthetic biology are worth the potential risk to human health?		
		Response Percent	Response Count
Yes		60.5%	23
No		28.9%	11
Don't Know		10.5%	4
	Commen	t view	9
	answere	d question	38
	skippe	ed question	11

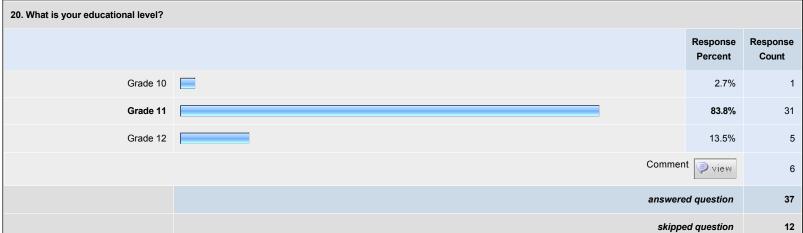
13. Do you believe synthetic biology should be used for non-therapeutic human enhancement?			
		Response Percent	Response Count
Yes		16.2%	6
No		67.6%	25
Don't Know		16.2%	6
	Other (please specify)		4
	answered question		37
	skipped question		12

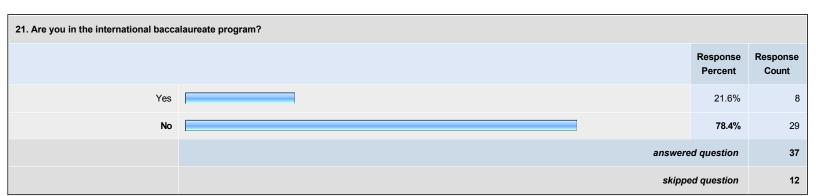
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	nink research in synthetic biology could/should address in high income countries?	14. What issues of problems do you to	
Response Count			
ew 37			
tion 37	answered question		
tion 12	skipped question		
_	think research in synthetic biology could/should address in low income countries?	15. What issues or problems do you t	
Response Count			
a 37			
tion 37	answered question		
tion 12	skipped question		
	see come from synthetic biology?	16. What products would you like to s	
Response	not come nom synthetic bloody.	10. What products would you like to 3	
Count			
ew 37	→ view		
	answered question		
tion 12	skipped question		
	al products are made available to low income countries?	17. How can we ensure that beneficia	
Response Count			
ew 37			
tion 37	answered question		
tion 12	skipped question		
	As develop william and locations?	40 Charles and had bigle and have a	
		18. Should synthetic biology be used to	
	Response Percent		
2.7% 1	2.7%	Yes	
	29.7%	No	
	67.6%	Don't Know	
11	If Yes give examples here if No say why		
tion 37	answered question		
tion 12	skipped question		
	19. Do you believe a high school curriculum should include an unit on synthetic biology?		
	Response		
	Percent	Yes	
<b>7.6%</b> 25	67.6%	Vae	

4 4







22. Are you in an advanced placement program?				
		Resp Perc		Response Count
Yes		3	32.4%	12
No		6	67.6%	25
		answered question		37
	skipped question		12	

23. Gender? (optional but preferable if you answer) write N/A if you do not want to answer it			
		Response Percent	Response Count
Male		43.2%	16
Female		56.8%	21
N/A		0.0%	0
Comment		0.0%	0
	answered question		37
	skipped question		12

24. Ethnicity? (optional but preferable if you answer) write N/A if you do not want to answer it				
		Response Percent	Response Count	
Yes		80.6%	29	
No		2.8%	1	
N/A		16.7%	6	
	Commer	Comment view		
	answered question		36	
	skippe	ed question	13	

25. Faith? (optional but preferable if you answer) write N/A if you do not want to answer it		
	Response Count	
	36	
answered question	36	
skipped question	13	