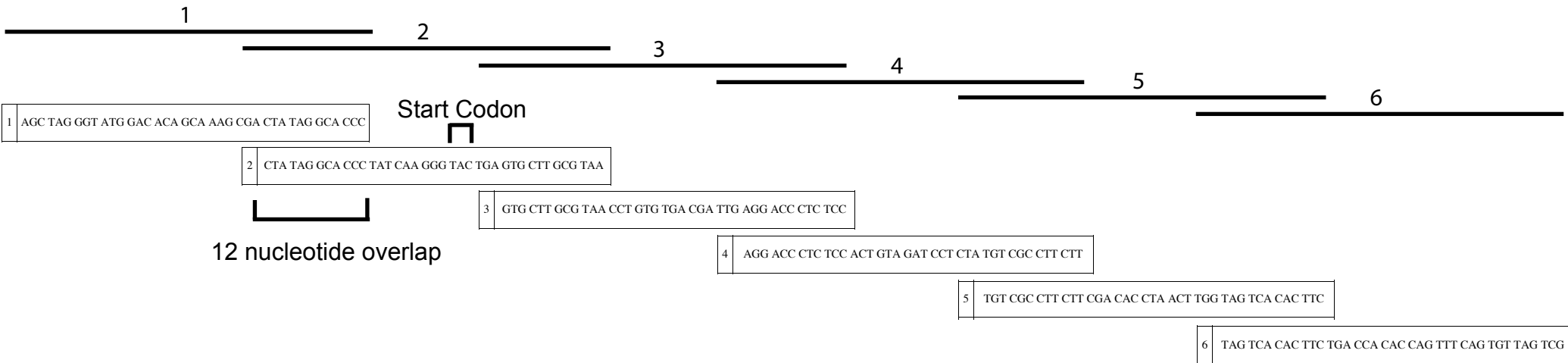


## Answer Key for Sequence Alignment and Transcription /Translation



Steps in activity:

- 1) Students align the sequences with overlapping fragments. Their sequences should have the numbering cut off.
- 2) As a group find the start codon, by looking at the codon table and working backwards.
- 2) Tell the students that the sequence is 14 codons long after the start codon.
- 3) Have students write out the 14 codons that they will need to transcribe and translate. This can be done on the worksheet.
- 4) Students transcribe and translate the sequence by using the codon table.
- 5) The amino acid sequence is “THERIGHTANSWER”

		Codon#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Transcription	↓	DNA	TAC	TGA	GTG	CTT	GCG	TAA	CCT	GTG	TGA	CGA	TTG	AGG	ACC	CTC	TCC
	↓	RNA	AUG	ACU	CAC	GAA	CGC	AUU	GGA	CAC	ACU	GCU	AAC	UCC	UGG	GAG	AGG
Translation	↓	A.A.	Start	T	H	E	R	I	G	H	T	A	N	S	W	E	R