

Exhibit 13.2: TIMSS Advanced 2015 Physics Items for Concurrent Calibration

Item Type	Points	Items Released in 2008		Items Common in 2008 and 2015		Items Introduced in 2015		Total	
		Items	Points	Items	Points	Items	Points	Items	Points
Multiple-Choice	1	20	20	20	20	39	39	79	79
Constructed Response	1	11	11	8	8	21	21	40	40
	2	6	12	3	6	11	22	20	40
Total		37	43	31	34	71	82	139	159

TIMSS Advanced 2015 Physics Items for Concurrent Calibration by Content and Cognitive Domains

Physics Content Domains	Items Released in 2008		Items Common in 2008 and 2015		Items Introduced in 2015		Total	
	Items	Points	Items	Points	Items	Points	Items	Points
Electricity & Magnetism	12	13	8	9	20	23	40	45
Mechanics & Thermodynamics	18	22	13	15	26	32	57	69
Wave Phenomena & Atomic/ Nuclear Physics	7	8	10	10	25	27	42	45

Physics Cognitive Domains	Items Released in 2008		Items Common in 2008 and 2015		Items Introduced in 2015		Total	
	Items	Points	Items	Points	Items	Points	Items	Points
Knowing	9	9	10	11	21	21	40	41
Applying	18	20	14	15	27	35	59	70
Reasoning	10	14	7	8	23	26	40	48
Total	37	43	31	34	71	82	139	159