

The Modeling Curriculum and the NYSS that Apply to Each Activity in Unit 5, the Particle Model of Light

Activity Number and title	New York State Standards	
1) Demo/Discussion: Limitations of Particle Model	Standard 1	S1 S2.1 S2.3 S2.4 S3.1 S3.3 S3.4
	Standard 2	2
	Standard 4	4.3i 4.3ii 4.3vii
	Standard 6	1.1 2.1 2.2 2.4
2) Properties of One Dimensional Waves	Standard 1	S1 S2.1 S2.3 S2.4 S3.1 S3.3 S3.4
	Standard 2	1.5 2
	Standard 4	4.1v 4.3i 4.3iv 4.3vi 4.3vii
	Standard 6	1.1 2.1 2.2 2.4
3) Lab: Measuring Wave speed	Standard 1	M1.1 M2.1 M3.1 S1 S2.1 S2.3 S2.4 S3.1 S3.3 S3.4
	Standard 4	4.3i 4.3iii 4.3vi 4.3vii
	Standard 6	2.1 2.2 2.3 2.4 5.1 5.2
4) Worksheet 1: 1 - D Waves	Standard 4	4.3i 4.3ii 4.3iii 4.3iv 4.3vii
	Standard 6	5.1 5.2
5) Quiz 1:1 - D Waves	Standard 1	M3.1
	Standard 4	4.3i 4.3ii 4.3vi
	Standard 6	2.3 4.1
6) Lab: Reflection & Refraction in 2-D	Standard 1	M1.1 M3.1 S1 S2.1 S2.3 S2.4 S3.1 S3.3

	Standard 2	S3.4
	Standard 4	1.5 4.3i 4.3ii 4.3iii 4.3vii 4.3ix
	Standard 6	2.1 2.2 2.3 2.4 4.1 5.1 5.2
7) Worksheet 2: Reflection & Refraction	Standard 4	4.3ii 4.3vii 4.3viii 4.3ix
	Standard 6	2.1 2.3 5.1
8) Quiz 2: Waves and Wave fronts	Standard 4	4.3ii 4.3vii 4.3viii 4.3ix
	Standard 6	2.1 2.3 5.1
9) Lab: Wave Diffraction	Standard 1	S1 S2.1 S2.3 S2.4 S3.1 S3.3 S3.4
	Standard 4	4.3i 4.3ii 4.3vii
	Standard 6	2.1 2.2 2.3 2.4
10) Worksheet 3: Diffraction	Standard 4	4.3i 4.3ii 4.3vii 4.3ix
	Standard 6	2.3
11) Lab: Wave Interference	Standard 1	M2.1 S1 S2.1 S2.3 S2.4 S3.1 S3.3 S3.4
	Standard 2	1.5
	Standard 4	4.3i 4.3ii 4.3vi 4.3vii
	Standard 6	2.1 2.2 2.3 2.4
12) Worksheet 4: Wave Interference	Standard 4	4.3i 4.3ii 4.3vi 4.3vii
	Standard 6	2.2
13) Lab: Diffraction & Interference With Light	Standard 1	M2.1 M3.1 S1 S2.1 S2.3 S2.4 S3.1 S3.3

	Standard 4	S3.4 4.3vi 4.3vii
	Standard 6	3 2.1 2.2 2.3 2.4 5.1 5.2
14) Worksheet 5: Diffraction/Interference of Light	Standard 4	4.3i 4.3ii 4.3vii 4.3viii
	Standard 6	2.3 5.1 5.2
	Standard 7	1
15) Quiz 3: Diffraction/Interference of Light	Standard 1	M3.1 S3.1
	Standard 4	4.3vi
	Standard 6	2.2 2.3 2.4 5.1
16) Optional Lab: Color Theory	Standard 1	S1 S2.1 S2.3 S2.4 S3.1 S3.3 S3.4
	Standard 2	1.2 3
	Standard 4	4.3i 4.3ii 4.3vii 4.3viii
	Standard 6	2.1 2.2 2.3 2.4
	Standard 7	1
17) Optional: Kinds of Waves	Standard 2	1.5
	Standard 6	2.1 2.2
18) Optional Demo: Polarization	Standard 1	S1 S2.1 S2.2 S2.3 S2.4 S3.1 S3.3 S3.4
	Standard 4	4.3vii
	Standard 6	2.1 2.2 2.4
19) Test: Wave Model of Light	Standard 1	M2.1 M3.1
	Standard 4	4.3i 4.3ii 4.3iii 4.3iv 4.3vi 4.3vii 4.3ix
	Standard 6	2.1 2.3 5.1 5.2