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**Electrophoresis Scenarios Teacher Preparation Guide**

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**Plight of the Southwestern Willow Flycatcher, Conservation:**

label	xylene cyanole	bromphenol blue	orange G or red food color
Area1, individual 1	+	+	-
Area1, individual 2	-	+	-
Area1, individual 3	-	+	-
Area1, individual 4	-	+	-
Area1, individual 5	+	+	-
Area1, individual 6	-	+	-
Area1, individual 7	-	+	-
Area1, individual 8	-	+	-
Area2, individual 1	+	+	-
Area2, individual 2	-	+	+
Area2, individual 3	-	-	+
Area2, individual 4	-	+	+
Area2, individual 5	-	+	-
Area2, individual 6	+	+	-
Area2, individual 7	-	+	+
Area2, individual 8	+	+	-

### Beyond Reasonable Doubt, Criminal Forensics:

label	xylene cyanole	bromphenol blue	orange G or red food color
evidence, locus 1	+	+	-
evidence, locus 2	-	+	-
evidence, locus 3	-	+	+
admin, locus 1	+	+	-
admin, locus 2	+	-	+
admin, locus 3	+	-	-
suspect 1, locus 1	+	+	-
suspect 1, locus 2	-	+	-
suspect 1, locus 3	-	+	+
suspect 2, locus 1	-	+	+
suspect 2, locus 2	-	+	-
suspect 2, locus 3	+	+	-

### One Mate or More, Animal Behavior:

label	xylene cyanole	bromphenol blue	orange G or red food color
-G, N1	+	+	-
-G, N2	-	+	+
-G, N3	+	+	-
-G, F	-	+	-
-G, M1	+	+	-
-G, M2	-	+	+
-G, M3	+	-	+
CA, N1	+	-	+
CA, N2	+	+	-
CA, N3	+	+	-
CA, F	+	-	-
CA, M1	-	+	-
CA, M2	+	+	-
CA, M3	-	-	+

### Diagnosis of a Genetic Disease:

label	xylene cyanole	bromphenol blue	orange G or red food color
Mary	+	+	-
John	+	-	-
Daniel	-	+	-
Alice	+	+	-
Michael	+	-	-
fetus	+	+	-