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| --- | --- | --- | --- | --- | --- | --- |
| Part one: | 4pts | 3pts | 2pts | 1pt | 0pts | Score |
| Dimensions | Student:  -Maximized space  -axes are labeled and visible  -Assigned Dimensions Handed in  -All pages are to scale  -Names are placed on work | Student is missing one of the following:  -Maximized space  -axes are labeled and visible  -Assigned Dimensions Handed in  -All pages are to scale  -Names present | Student is missing two of the following:  -Maximized space  -axes are labeled and visible  -Assigned Dimensions Handed in  -All pages are to scale  -Names present | Student is missing three of the following:  -Maximized space  -axes are labeled and visible  -Assigned Dimensions Handed in  -All pages are to scale  -names present | Student is missing the following:  -Maximized space  -axes are labeled and visible  -Assigned Dimensions Handed in  -All pages are to scale  -names present |  |
| Conic sections | Every Conic section is used in the flower with at least two circles. | Missing one of the circles for the construction of the base and center. | Missing a conic section or both circles. | Missing two conic sections. | Only has one conic section present. |  |

Part two

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| --- | --- | --- | --- | --- | --- | --- |
| Labeled and organized | Each equation and characteristic are clearly labeled to connect to a specific petal. (organized)  All equations are in standard form  All information is neat and on a separate page from petals. | Equations and characteristics are placed together but it is unclear as to which graph they connect with.  Or the equations are not in standard form.  Or the information is not neat.  Or on a separate sheet of paper. | Two of the following: -It is unclear as to which information is for what equation or petal.  -the equations are not in standard form.  - the information is not neat.  - on a separate sheet of paper. | Three of the following:  It is unclear as to which information is for what equation or petal.  -the equations are not in standard form.  - the information is not neat.  - on a separate sheet of paper. | The material is not labeled in neat and clear order. The equations are not in standard form. |  |
| Characteristics | No characteristics are missing. | Few characteristics are missing | Several characteristics are missing | Most characteristics are missing. | No characteristics were given. |  |
| Design | Student created a unique realistic flower design | Student created flower designs that make sense for nature. | Student created flower design that seems questionable realistically | Students created flowers that would not exist in nature. | Students did not create flowers. |  |
| Flowers | Student assembled 2 flowers that were neat and very realistic (3 dimensional) with curved petals) with a minimum of three layers. | Student assembled 2 flowers that were neat and almost 3-d | Students assembled flowers that were not neat or did not have three layers. | Students assembled flowers that were not neat and did not have three layers. | Students did not assemble flowers |  |
| Equations and characteristics | Students identified correctly all the characteristics for each conic section. | Students had few mistakes when finding equation and characteristics. | Student correctly identified equations and characteristics for one flower or had several mistakes throughout. | Students had many mistakes with equations and characteristics or is missing all equations or characteristics for one flower. | Student was missing equations or characteristics for flowers. |  |
| Dimensions | Constructed flowers are of correct dimensions |  | One Constructed flower is of correct dimensions and one is not. |  | Constructed flowers are of incorrect dimensions. |  |

Part three

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| --- | --- | --- | --- | --- | --- | --- |
| Flowers | Student assembled 2 flowers that were neat and very realistic (3 dimensional) with curved petals) with a minimum of three layers. | Student assembled 2 flowers that were neat and almost 3-d | Students assembled flowers that were not neat or did not have three layers. | Students assembled flowers that were not neat and did not have three layers. | Students did not assemble flowers |  |
| On time | Students turned final flower in on time. | 1 day late | 2 days late | 3 days late | Did not turn in final flowers. |  |